Heuristic Evaluation of [DiarWe]

For a more in-depth overview of A9, please refer to the <u>A9 assignment spec</u>.

1. Problem/Prototype Description

DiareWe is an interactive journaling tool enabling users to connect, share their lives, and learn about each other, across generations.

2. Violations Found

General

- 1. H4: Consistency & Standards / Severity 3 / Found by: A, C, D
 - The interface used the string "Save" on the first screen for saving the user's profile, but used the string "Update" on the second screen. Users may be confused by this different terminology for the same function.
 - Fix: Use the same string on each screen.
 - Mention the task that the violation applies to

Task 1: Read + react to other's journal entries

- 1. H1: Visibility of System Status / Severity: 1 / Found by A
 - Description: The functionality of the play button on the first post is unclear. There is no obvious indication of what content it will play or where it will navigate the user.
 - Rationale: Users expect to know what play buttons will do.
 - Fix: Accompany the play button with a label or tooltip that explains its function, such as "Play video" or "Listen to audio". Additionally, make sure that the system provides feedback once the button is pressed, such as navigating to a media player screen or starting playback directly within the current view.
- 2. H1 Visibility of System Status / Severity: 3 // Found by A, D

Description: Clicking on additional emojis, other than the heart, does not create any changes or feedback.

Rationale: The system should always inform users about the results of their operations and communicate the state of the system.

Fix: Ensure that all interactive elements like reaction emojis provide immediate visual feedback when clicked.

3. H1 Visibility of System Status / Severity: 3 // Found by A, D

Description: The 'Leave a comment' text area does not allow for user input.

Rationale: Users should receive feedback when interacting with input fields to understand if the system is responsive.

Fix: Enable the text area to accept user input and provide visual cues that text can be entered.

4. H1 Visibility of System Status / Severity: 3 // Found by A, C, D

Description: After entering a comment, pressing the 'Post' button gives no confirmation that the comment has been submitted.

Rationale: The system should always inform users of the status of their actions.

Fix: Implement a confirmation message or visual indicator that shows the comment has been successfully posted.

5. H1 Visibility of System Status / Severity: 3 // Found by A, C, D

Description: There is no indication of the time or location from which posts were made, nor is there an indication of users' online status or last active time.

Rationale: Providing location context for posts, as well as understanding user availability, can help with social interactions within the app.

Fix: Include timestamps, location tags, and online status indicators on posts and profiles.

6. H1 Visibility of System Status/ Severity: 3 // Found by A, B, C, D

Description: The mailbox says new mail is here but leaves out who the new mail is from Rationale: Since users can also see previous journal entries once they click on the mailbox, they may not know which entries are new ones if there are mails from multiple people Fix: Add the name of the contact[s] that the new mail is from and also have a new tag/marker on the latest journal entries

7. H2 Match Between System and the Real World / Severity: 1// Found by C Description: Reaction icons such as the eye emoji may not be intuitively understood by older users. Rationale: Icons should match users' expectations and real-world conventions to be quickly recognized by all user groups.

Fix: Change emojis or use more descriptive labels or tooltips for icons to ensure clarity for all users, regardless of age.

8. H2. Match between system and the real world / Severity: 2 // Found by A, C, D Description: The Good Morning ____, you've got mail page doesn't offer the real-world convention for opening mail

Rationale: The user needs to click on the mail box to access the home feed. However, there's no real life convention in which the user clicks on a mailbox to access it. The mailbox doesn't indicate that it's a button or some form of interactive element. Neither is there any written instruction to interact with the mailbox

Fix: Make it more clear that the mailbox is interactable by maybe adding a symbol of a button pointing to the mailbox, adding the text "click mailbox to check mail/home feed", or some other familiar convention that clearly expresses the interactive nature of the mailbox

9. H3 User Control and Freedom/ Severity: 2 // Found by A, D Description: Missing option to edit/delete existing comments Rationale: Users might want to correct typos or take back certain comments which they may realize only after posting it

Fix: Add an edit or a delete button

10. H3. User control and freedom / Severity: 2 // Found by A, Description: No ability to close the reaction tab once opened for a post

Rationale: While it does block the question, the user can still use most of the capabilities of the app while the reaction tab is open

Fix: Close the reaction tab by clicking anywhere outside of the tab

11. H3. User control and freedom / Severity: 2 // Found by A, C, D Description: No ability to undo a reaction

Rationale: The user should be able to take back or change a reaction to a post once made, especially since it might have been done by accident. Currently there's no option for it. Fix: Allow users to change or remove the reaction by opening up the reactions tab and deselecting the current reaction.

12. H4. Consistency and standards / Severity: 2 // Found by A,

Description: The layout of the content for the journal entries can be confusing for the user due to its inconsistent layout

Rationale: In Grandpa Larry's post, there are three different media components: Carlos Alcaraz, the album cover, and the play button. Without knowing what's what, it can be confusing what image the play button corresponds to. It's confusing whether an image is just an image or music.

Fix: Put the play button on top of the album cover so it's clear that it's a music entry. You could also add a divider to separate the music and image components

13. H4 Consistency and Standards / Severity: 1// Found by A

Description: The "YOU'VE GOT MAIL" to indicate notifications may be unclear for older users who are unsure where to click to access the notifications.

Rationale: Consistency in iconography helps users understand how to interact with an interface, and the current metaphor may not be intuitive for all user groups, especially older ones who might be used to literal icons or find the arrow unclear of where exactly to click.

Fix: Use a universally recognized icon for notifications, such as an alert symbol, and ensure it is placed in a conventional location.

14. H5 Error Prevention/ Severity: 4 // Found by B, C

Description: The plus button to add a new journal entry exceeds the bottom menu nav bar and overlaps with the screen for reading others' journal entries

Rationale: The plus button could be mistakenly pressed when scrolling through the journal posts Fix: Reduce the size of the plus button to fit within the nav bar

15. H5 Error Prevention / Severity: 3 // Found by A, D

Description: Users are unable to scroll down to view additional content such as Grandma Nancy's post.

Rationale: Interfaces should prevent errors by allowing users to perform all intended actions, including scrolling to view content.

Fix: Ensure that the feed is scrollable and that users can interact with all posts.

16. H5 Error Prevention / Severity: 3 // Found by A, C, D

Description: Clicking on Grandpa Larry's and Grandma Nancy's icons does not lead to their profiles. Rationale: Users expect that clicking on a profile icon or name will take them to that user's profile. Fix: Ensure that profile icons and names are clickable and link to the respective user profiles.

17. H6. Recognition rather than recall / Severity: 2 // Found by A, C, D
Description: It is not intuitive to click the mailbox to dismiss the Good Morning vo

Description: It is not intuitive to click the mailbox to dismiss the Good Morning ____, you've got mail page

Rationale: There's no indication for the user to click the mail box nor any indication of the expected result of clicking the mailbox. This results in confusion as the user wants to access the home page, but is instead met with a notification with no intuitive next step. The user needs to learn to click on the mailbox to access the home page instead of it being easily recognizable.

Fix: Remove the you've got mail page, make it so that it only shows up when the user opens up the app for the first time, or at least separate it from the home page. Maybe also add a button that says "click to check mail/home feed" or something like that

18. H7. Flexibility and efficiency of use / Severity: 3 // Found by A, D Description: The Good Morning ____, you've got mail page appearing whenever the user navigates to the home page is redundant and confusing, making using the app less efficient Rationale: The user shouldn't have to be blocked from accessing their home page every time by a notification that takes up the whole page. This adds an unnecessary click every time the user tries to access the home page and adds confusion given that instead of being met by the home page when clicking the home page tab, they are redirected to the you've got mail page. Fix: Remove the you've got mail page, make it so that it only shows up when the user opens up the app for the first time, or at least separate it from the home page.

19. H8 Aesthetic and Minimalist Design / Severity: 3 // Found by A, C Description: Grandpa Larry and Grandma Nancy are represented by icons rather than photos, making the interface feel less personal and human.

Rationale: Generic icons juxtapose the purpose of the app which is to connect.

Fix: Replace generic icons with actual user photos to create a more personal and engaging user experience.

20. H8 Aesthetic and Minimalist Design / Severity: 1// Found by A,

Description: The "plus" button is disproportionately large relative to other elements on the feed page for the task unrelated to reading other people's entries.

Rationale: Interface elements should be sized appropriately according to their importance and frequency.

Fix: Resize the "plus" button to be more in harmony with the rest of the navigation elements and reduce visual clutter.

21. H11: Accessible Design / Severity: 3 // Found by A, D

Description: The short description of the diary entry is in a small font and the Read More is in light gray and hard to read, especially for older populations, who may not know where to click to see the full article.

Rationale: All users should be able to read and understand content without difficulty, including those with visual difficulties.

Fix: Ensure that all text has a high contrast against its background, include a button for read more, and consider providing alternative text descriptions for images.

22. H11: Accessible Design / Severity: 2 // Found by A, C

Description: The emoji icon is gray, the 'Post' button is gray with white text, and the 'Leave a comment...' prompt is in light gray, both of which may be difficult to read, especially for users with visual impairments or in bright lighting conditions.

Rationale: Text contrast and color play a crucial role in readability, especially for older users or those with visual impairments. Ensuring high contrast between text and background is essential for accessibility.

Fix: Increase the contrast for the emoji icon, 'Post' button, and the 'Leave a comment...' prompt by using darker colors for backgrounds and lighter colors for text, or vice versa.

Task 2: Create a journal entry with elements of a user's choice

1. H1: Visibility of System Status / Severity: 3 // Found by A, D

Description: The delete button after writing a journal entry doesn't provide feedback or redirect users appropriately.

Rationale: Users expect to understand the outcome of their actions within the app.

Fix: Upon deletion of an entry, redirect users to a blank journal page or provide a status message confirming the deletion.

2. H1: Visibility of System Status / Severity: 3 // Found by A, D

Description: It's unclear what content the play button under the album will initiate, especially a problem for older users.

Rationale: Users should receive clear indications of the action that will occur when they interact with these controls.

Fix: Provide a label or tooltip explaining what the play button will show when pressed.

3. H1: Visibility of System Status / Severity: 2 / Found by A, C

Description: There's no clear indication of the current stage within the "Create Journal" process. Rationale: Users may not be sure of their progress through the steps with the app without a progress indicator.

Fix: Add a progress bar or step indicator that highlights the user's current stage in the process.

4. H1. Visibility of system status/ Severity: 3 / Found by A, B, D Description: There's no confirmation of successfully having posted a journal entry

Rationale: After completing the journal entry and pressing the post button, the user is met with a page with the image of a plant, "back to home" button, and a share button. The user doesn't receive any feedback on whether the system received the journal entry or not

Fix: Add text saying "journal successfully posted" or some other confirmation to the "back to home" page

5. H2: Match between System and the Real World / Severity: 2 / Found by A, C Description: It could be unclear to users, particularly older users, whether they should click the play button or the microphone icon to hear audio, which may lead to confusion or incorrect interactions. Rationale: When two icons commonly associated with audio are presented, it can be unclear which one should be used for playback.

Fix: Streamline the user interface to use a single, clear icon for audio playback.

6. H2: Match between System and the Real World / Severity: 2 / Found by A, C Description: The eraser icon on the last page after creating a journal entry is ambiguous, leading to uncertainty about its purpose—whether it's for editing, deleting, or another function. Rationale: An eraser typically suggests removing or deleting something, but its exact function here is unclear, which could cause hesitation or incorrect use.

Fix: Replace the eraser icon with a more descriptive icon or add a text label to clarify its function. If it is meant to delete the entry, a trash can icon might be more universally understood. If it's for editing, a pencil might be good to use. Additionally, tooltips or a brief explanatory text upon hovering or focusing can help users understand the intended action.

7. H3: User Control and Freedom / Severity: 2 / Found by A, B, C, D

Description: There is no clear option to undo or edit after writing a journal entry on the share page, just the trash option.

Rationale: Users may accidentally submit an entry before it's finished or may want to edit after submission.

Fix: Provide an "Edit" or "Undo" option after an entry has been completed.

8. H3. User control and freedom/ Severity: 1/ Found by B

Description: For the image and audio input pages, we lose the skip button after uploading media, but before confirming

Rationale: The user should maintain the ability to skip media uploading as long as they haven't confirmed it as they might have uploaded the wrong media or might have changed their minds and might not want to upload any more.

Fix: Keep the skip buttons until confirming the media upload.

9. H3: User Control and Freedom / Severity: 3 / Found by A, B, C

Description: Users may feel trapped in the "Create Journal" flow with no clear option to edit, exit or save progress and return later.

Rationale: Users expect to have control over their navigation, including the ability to exit a process at any time.

Fix: Include a "Save & Exit" option or clear indicators that they can return to the homepage without losing progress.

10. H3 User control and freedom/ Severity: 2 / Found by ADescription: Not possible to add both voice and text inputs to the same entryRationale: Users may want to add a voice note along with a text inputFix: Same fix as #5, have another menu bar that gives users the choice for the type of input they want to add

11. H4: Consistency and standards / Severity: 3 / Found by C Description: After selecting a Chinese New Year prompt, the start journaling page incorrectly shows the "pop culture" prompt instead.

Rationale: This inconsistency in content display can confuse users. Fix: Ensure that the prompt selected by the user is the right one shown to start journaling.

12. H4. Consistency and standards / Severity: 3 / Found by A, B, C, D Description: The back buttons in the moderate task are inconsistent and confusing Rationale: The back button is usually used to go back to the previous spot. However, the way that it's implemented for the "pick a prompt/create a prompt" and "new prompt" pages, it takes you to the home page instead regardless of what the actual previous page was. Also, most of the back buttons throughout the logic flow of the entry creation takes you to a page that's not the actual previous page. This can make it incredibly difficult to make edits and ensure that you are uploading the correct information

Fix: Make it so that the back button takes you back to the actual previous page

13. H4. Consistency and standards/ Severity: 1 / Found by C Description: confirmation button inconsistent in the audio input page Rationale: When the user creates an audio entry, they are met with the option to either edit or share the audio. However, this is inconsistent with the other parts of the journal creation where users have the option to either press a green check mark or a red cross to confirm or deny their media entry. This is inconsistent and leads to confusion on the result of pressing "share" or "edit" Fix: change buttons in the audio media input page to the check and cross buttons

14. H4. Consistency and standards/ Severity: 2 / Found by A, B, C Description: "Sharing" is inconsistent in the context of entry creation Rationale: When the user creates an audio entry, they are met with the option to either edit or share the audio. However, after posting their journal entry, they are given the option to share by pressing a share icon. One "sharing" appears to signify confirming the current audio while the share icon (probably?) prompts the user to share their journal entry to specific people. This is inconsistent and leads to confusion

Fix: change buttons in the audio media input page to the check and cross buttons

15. H4. Consistency and standards/ Severity: 1 / Found by A

Description: "Sharing" can only be done for your own creation for a limited time Rationale: The user is shown the share symbol only after creating their journal entry, but this option doesn't appear for other journal entry posts, whether made by the user or posts on their feed. This is an inconsistent functionality that can lead to confusion. Sharing capability should be consistent Fix: either get rid of the sharing functionality or make it consistently available for all posts

16. H4 Consistency and standards/Severity: 3 / Found by A, B, C, D Description: Edit and Delete buttons, although in different screens, share a very similar color fill Rationale: Users might get confused by the similar color but different functionalities of the two buttons

Fix: Change the color fill for one of the buttons

17. H4 Consistency and standards/Severity: 3 / Found by A, B, D
Description: Inconsistency with "share" and "post"
Rationale: The preview page had options to "share" and "edit" the post, but after clicking on the "share" and selecting the list of friends, the button below says "post" instead of share.
Fix: Change the button text to "share"

18. H5 Error prevention/ Severity: 3 / Found by A, B, D Description: Unable to edit the text but only save or delete the entire text Rationale: In the text input preview, users might only be able to delete the entire text by accident if they simply wanted to make edits to the current entry Fix: Add an edit button to the text entry preview

19. H6 Recognition rather than recall/ Severity: 2 / Found by A, B Description: Users cannot view the content they just wrote or the photo they just took in the current screen given the sequential nature of adding new modalities of input into the journal Rationale: If users want to add complementary voice notes or images, they will have to go back to previous screens to remember what they might have written in order to add a new image or select a related song

Fix: Construct the final UI as you progress through the different input modes

20. H6 Recognition rather than recall/Severity: 3 / Found by C Description: Favourite or frequent contacts are not identified in the share screen Rationale: Users might have to scroll down to remember the people in their contact list that they typically share their journal entries Fix: Add a favourties tag and have these contacts at the top of the list

21. H7 Flexibility and efficiency of use/ Severity: 3 / Found by A Description: It is not possible to directly select a song without adding a bunch of other inputs, or take a picture first and then add a corresponding text to describe it Rationale: Expert users might want to jump around different input modes depending on the type of content they want to generate

Fix: Have another menu bar that gives users the choice for the type of input they want to add

22. H7 Flexibility and efficiency of use/ Severity: 1/ Found by C Description: Users cannot skip text/voice entry to just have photo or song related entry Rationale: Users may want to share short quick updates through images only Fix: Add a skip button to text/voice input screen

23. H7 Flexibility and efficiency of use/ Severity: 1 / Found by A Description: Users cannot rearrange the layout of the final text entry Rationale: Customizing how the entry looks could be important to extreme users Fix: Add an option to move around the different input components in the final preview/edit option

24. H7 Flexibility and efficiecy of use/Severity: 2 / Found by A, B Description: No quick way to to find contacts other than by scrolling the list Rationale: If someone has a decently long contacts list, it might be hard to just scroll through a long list of contacts to select only a few Fix: Add a search functionality or arrange the contacts alphabetically

25. H7: Flexibility and Efficiency of Use / Severity: 3 / Found by A, B Description: The interface does not indicate any shortcuts or efficient ways for users to both add audio and written descriptions for the same entry. Rationale: Users should be able to do both at the same time to streamline the usage. Fix: Introduce a way to allow experienced users to add audio and text simultaneously. This could be through a 'Add More' option after one type of content is added.

26. H8. Aesthetic and minimalist design/ Severity: 1/ Found by A, C Description: The "Add" button in the prompt creation page doesn't seem to do anything? Rationale: Pressing the "Add" button in the prompt creation page just makes the text in the button change to "Done." It's not clear what the add button does as there's no feedback. Assuming there's no purpose, it's redundant. Assuming there is, there should be clearer feedback. -Are you actually gonna read all this?-

Fix: Either remove the "Add" button or add some feedback on its effect

27. H9: Help users recognize, diagnose, and recover from errors / Severity: 3 / Found by A, B, D Description: The current interface lacks a spell-checking feature, which could lead to errors in user-generated content, especially for non-native English speakers.

Rationale: Spelling errors can be a common source of frustration and affect the understanding of the content.

Fix: Integrate a spell-check function that underlines misspelled words in red and offers grammar suggestions, similar to the functionality available in many text editing software. This feature would be particularly beneficial for users who may not be proficient in English or who are prone to making errors.

Task 3: Complex: Create + view a customizable "vault" of past journals with others where users can group journals by theme

1. H2: Match between System and the Real World / Severity: 1 / Found by A Description: The use of the tomb-like icons might have many connotations, such as that the content is locked or private, or that it is a tombstone, it could have "end of life" references, which could be misleading if the vault is meant to store memories.

Rationale: Icons should accurately reflect the action or status they represent to prevent confusion. Fix: Use icons that suggest grouping and sharing, such as folders or album icons.

2. H2 Match between system and the real world/Severity: 3 / Found by A, B

Description: The location for the plus button for the vault at the top left corner is not intuitive Rationale: If users would add more vaults than edit them, it might be easier to use if it were in the top right corner instead of top left (similar to why the accept button is on the right and reject on the left)

Fix: Reposition the edit/add button for the vault

3. H3 User Control and Freedom / Severity: 2 / Found by A, B

Description: It is not apparent how a user might undo the creation of a vault or remove items from it.

Rationale: Users should have the ability to easily reverse actions or remove content from customizable collections.

Fix: Include clear options for deleting or editing items within the vault.

4. H3 User Control and Freedom / Severity: 3 / Found by A, B

Description: Users cannot go back to the main vault view, besides clicking on the key on the main tab page, after selecting and viewing an individual entry.

Rationale: The lack of a 'back' function restricts user navigation, making it more confusing on how to go back.

Fix: Include a clearly visible 'back' button or gesture control that allows users to return to the previous screen without unnecessary steps.

5. H4. Consistency and standards/ Severity: 1/ Found by C

Description: There's different ways to navigate the different vault collection media prompts Rationale: While the user can navigate through the past albums and journal entries with arrows, they have to navigate the images by scrolling down, which is inconsistent (horizontal + arrows v.s. vertical)

Fix: Choose one way to navigate the entries, and stick w/ it

6. H4. Consistency and standards/ Severity: 2 / Found by A, B, D Description: Different location of the play button for albums

Rationale: While the play button is placed on top of the album covers in the vault, in the other parts of the app it's placed under it. This is inconsistent Fix: Choose one way and stick w/ it

7. H4 Consistency and standards/Severity: 4 / Found by B
 Description: It is unclear what the function of the edit button is
 Rationale: Users might be confused about whether the edit button is to customize the layout of the vault or to edit the content of each vault
 Fix: Add an edit button inside each vault to avoid confusion

8. H4 Consistency and standards/Severity: 3 / Found by A, B Description: The vault add button is a symbol whereas the edit button is in text Rationale: Since one of the buttons uses text and the other a symbol, the UI looks a bit jarring Fix: Change the add button symbol to add text or change the edit button text to an edit symbol

9. H5: Error Prevention / Severity: 3 / Found by A, B
Description: The 'plus' button intended for adding a new entry to the vault is non-functional.
Rationale: The primary function for users to add a vault should be working.
Fix: Ensure the 'plus' button is interactive and leads to a vault addition.

10. H5: Error Prevention / Severity: 3 / Found by A, B Description: The 'edit' button on the vault page does not initiate an editing process for the selection.

Rationale: Users might press the edit button expecting to modify their vault but find that nothing happens.

Fix: Make the 'edit' button functional, opening an edit mode that clearly allows users to make and save changes to their entries.

11. H6: Recognition Rather Than Recall / Severity: 1 / Found by A

Description: The function of the 'plus' button in the context of the vault is ambiguous – does it add a new vault, a new entry, or is it for sharing?

Rationale: Users should be able to recognize what an action will do without having to remember the function from previous use.

Fix: Provide labels or tooltips that clearly indicate the purpose of the 'plus' button in this context.

12. H7: Flexibility and Efficiency of Use / Severity: 1 / Found by A

Description: There are no visible shortcuts or tools for power users who may want to organize and view their journals more efficiently.

Rationale: Users who interact with the vault feature frequently would benefit from efficiency tools. Fix: Include features like drag-and-drop organization, bulk actions, or tagging for efficient management of vault items.

13. H8. Aesthetic and minimalist design/ Severity: 2 / Found by A, B, C, D

https://hci.stanford.edu/courses/cs147/2023/au/calendar.html

Description: The vault page is too crowded

Rationale: Both the vault and vault collection pages are too crowded with different buttons and information. This makes it hard to understand and navigate. This same information can be presented more compactly in a way that distills it to its core functionality

Fix: For the vault page, maybe replace the columns and rows with just one big interactive calendar . For the collections, you can divide the different journal entries by categories instead of just shoving them onto the page

14. H6. Recognition rather than recall/ Severity: 3 / Found by B, DDescription: The vault page relies on recallingRationale: The use of small little emojis on letter box symbols are easy to see, but they are noteasily differentiable and their particular topics are not recognizable. The user is forced to manually

go through all of the boxes until they find the one they are looking for or just remember from last time.

Fix: Maybe add a small description for each entry. At least a date or a month.

15. H8 Aesthetic and minimalist design/Severity: 3 / Found by B, CDescription: The two plus buttons on the vault page is confusingRationale: The two plus buttons while different in shape might mislead the user to press on the bigger plus sign which is actually to create a new journal entryFix: Change the vault add button to an even more different color

16. H10 Help and documentation/Severity: 1 / Found by A, B Description: Missing walkthrough for how to use vault Rationale: Since the idea of curating a vault is different from existing everyday interactions of typical apps, a walkthrough or documentation would be helpful Fix: Add a walkthrough for how someone could use a vault and for what purpose

<mark>All Tasks</mark>

H2. Match between system and the real world/ Severity: 3 / Found by A, B
 Description: Many of the buttons don't click where you expect them to
 Rationale: There are several buttons whose click area is far smaller than one expects them to be.
 For instance, the mail box one should be the whole page, the add friends button should be the entire row, the calendar dates should be the entire calendar date block instead of just the number, and many other buttons have weird click areas

Fix: Increase the click area of buttons to fill their containers

2. H11. Accessible design/ Severity: 4 / Found by A, D Description: Many of the buttons used for the app are small and use minimal contrast, making them hard to read, especially for old users

Rationale: There are several buttons that are small and hard to see because of a lack of contrast throughout the app. While it does add to the aesthetic, given that a big chunk of the target audience are old people, visibility should be a priority to be more accessible. For example, the use of a small, red shuffle symbol on a red background in the prompt selection page might be hard for visually impaired users to use and old people to accurately click. Similarly, in the Add Friends screen, the add button is small and hard to click too. Another big one are the reaction buttons, which are tiny so they are hard to see and click. While there is a setting to increase the font size, I think it's also important to pay attention to the intractable components too Fix: Make intractable buttons bigger and more contrasting with the background. Also, could add a setting to control size.

<mark>Extra Violations</mark>

H1 Visibility of system status/Severity: 4 / Found by B
 Description: No tab for checking the list of current friends
 Rationale: While the add friends menu takes me to my contact list through which I can add
 someone as a friend, the tab to view my list of current friends and to add/remove them is missing
 Fix: Add a menu tab or a section inside the profile page to view and edit the list of friends

2. H2 Match between system and real world/Severity: 4 / Found by C Description: Icon for profile tab in the bottom menu nav bar looks like a camera shutter button Rationale: It is unclear what the current rightmost icon in the navigation bar does because it is not intuitive that it will take me to my profile page

Fix: The outline of a human head or face would be a more commonly used or intuitive icon

3. H3. User control and freedom/ Severity: 3 / Found by A, B Description: There's no back button once the user looks at their own post Rationale: There's no back button once the user looks at their own post Fix: Add a back button

4. H3. User control and freedom/ Severity: 3 / Found by A, B Description: There's no back button once the user looks at their friend list, their friend's profile, or their friend's post Rationale: There's no back button once the user looks at their friend list, their friend's profile, or

their friend's post

Fix: Add a back button

5. H4. Consistency and standards/ Severity: 2 / Found by A, B Description: There's a star button when looking at one's journal entry from one's page, but we don't have that same option when looking at other's Rationale: There's a star button when looking at one's journal entry from one's page, but we don't have that same option when looking at other's. Inconsistent Fix: Add functionality for other posts or remove

6. H4. Consistency and standards/ Severity: 2 / Found by A, B Description: Location of reaction is inconsistent Rationale: The reactions to one's posts appear below the post while for others it appears above. Fix: Choose one and stick w/ it

7. H4. Consistency and standards/ Severity: 1/ Found by C Description: Inconsistent profile pictures Rationale: The profile pictures for the same users are different. For instance, Aaron's changes from a young man to an old woman.

Fix: Make profile pictures consistent

8. H4. Consistency and standards/ Severity: 1/ Found by A Description: Inconsistency on how albums are labeled Rationale: In most of the app, albums/songs are indicated to be what they are by being paired with a play symbol. However, when looking at Aaron's profile page, the Imagine Dragons album doesn't have a play symbol

Fix: Overlay a play symbol on top of albums

9. H12: Value Alignment and Inclusion / Severity: 2 / Found by A, B

Problem Description: The display of the number of friends next to user profiles might lead to users, especially older individuals who may have fewer connections, feeling self-conscious or alienated. Rationale: Social applications should foster inclusivity and consider the diverse circumstances of their users. Showcasing friend counts can inadvertently emphasize popularity and lead to negative social comparisons.

Suggested Fix: Consider removing the public display of friend counts or providing users with the option to hide this number from their profile to promote a more inclusive environment that values quality of interactions over quantity.

3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status	0	1	1	8	1	11
H2: Match Sys & World	0	2	3	2	1	8
H3: User Control	0	1	6	4	0	11

A Google Sheet Template is provided <u>here</u> to help you calculate numbers.

H4: Consistency & Standards	0	6	5	5	1	17
H5: Error Prevention	0	0	0	5	1	6
H6: Recognition not Recall	0	1	2	2	0	5
H7: Efficiency of Use	0	3	1	3	0	7
H8: Minimalist Design	0	2	1	2	0	5
H9: Help Users with Errors	0	0	0	1	0	1
H10: Help & Documentation	0	1	0	0	0	1
H11: Accessible Design	0	0	1	1	1	3
H12: Value Alignment & Incl	0	0	1	0	0	1
Total Violations by Severity	0	17	21	33	5	76

4. Evaluation Statistics (in %)

Severity/Eval uator	Total # of Sev. Found	# Evaluat or A found	Evaluat or A %	# Evaluat or B found	Evaluat or B %	# Evaluat or C found	Evaluat or C %	# Evaluat or D found	Evaluat or D %
% Sev. 0	0	0	0	0	0	0	0	0	0
% Sev. 1	17	11	64.7058 8235	3	17.6470 5882	7	41.17647 059	2	11.76 1176
% Sev. 2	21	9	42.8571 4286	5	23.8095 2381	9	42.8571 4286	8	38.09 3891
% Sev. 3	33	6	18.18181 818	9	27.2727 2727	10	30.3030 303	9	27.27 2727
% Sev. 4	5	1	20	5	100	3	60	9	180
Total (sev 3 &	38	7	18.4210	14	36.8421	13	34.2105	18	47.36

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4)			5263		0526		2632		4736
Total									
(all severity			43.4209		28.9473		38.1578		36.84
levels)	76	33	955	22	3033	29	4453	28	8765

*Note that the bottom rows are *not* calculated by adding the numbers above it.

5. Summary Recommendations

Overall, we loved this prototype! The user interface you've designed has a friendly and inviting aesthetic that aligns well with the goal of creating a personal journaling experience across generations. The visual design is warm and approachable, creating an environment that encourages users to engage with the content. However, the heuristic evaluation has highlighted several areas where the interface could be refined to enhance usability and accessibility, especially for older users who may be less familiar with digital conventions.

We really liked the aesthetics and design patterns in the app! The homepage mailbox and the notification that there is a new mail was also a refreshing and novel design. In terms of the HE violations, the most frequent ones are around consistency (H4) and efficiency (H1/H3). For consistency, the common trend seems to be around small details on using the same colors, texts, or symbols for interactions that let users fulfill similar functions. Regarding efficiency, there might be certain areas where you might have to rethink the workflow of certain tasks. In particular, for Task 2 to create a new journal entry, there are a lot of steps that a user has to sequentially go through in order to finally be able to share it with someone. This might potentially put some users off from writing and sharing more journal entries. Most of these efficiency violations could be fixed by rearranging how people create new journal entries by maybe allowing them to choose what tools they want to use to add a specific type of input, all on the same screen,

Following a thorough heuristic evaluation of DiarWe, some areas for improvement have been identified to enhance the overall user experience. These areas encompass several usability heuristics, including consistency and standards, user control and freedom, visibility of system status, aesthetic design, and accessibility. Notably, there's room for improvement in achieving a more consistent user interface, including button placement, reaction button location, and reducing clutter in pages like Vault and Vault Collection. Additionally, enhancing user control and freedom, such as allowing the closure of reaction tabs, undoing reactions, and more intuitive navigation, is essential. Clear and reassuring feedback for user actions, specifically the confirmation of successful journal entry posting, is currently lacking. Furthermore, attention to accessibility is crucial, with small buttons and low-contrast elements potentially posing challenges for older and visually impaired users. Aligning interface elements with real-world conventions can enhance usability. Lastly, offering the ability to view prompts during audio or text response review and visually distinguishing audio entries can greatly improve user understanding and context.

A recurring theme across the heuristics is the need for clearer system feedback and user control. Users benefit from knowing the status of their interactions with the system, such as whether their journal entries have been successfully saved or submitted. Addressing these areas by adding progress indicators, confirmations, and more intuitive navigation controls will significantly improve the usability of the interface.

I also think consistency in the design language and error prevention are important to consider. Users should not have to guess the meaning of icons or the outcome of their actions. For instance, the play button's functionality and the role of the large red plus button should be more clear. Furthermore, by preventing potential errors before they occur, such as incorporating spell-check and clarifying the icons, you can ensure a smoother interaction for users.

The interface would also benefit from a more robust help and documentation system. Given the complex nature of this task, especially for both very young users (grandchildren) and older users (grandparents), users should have easy access to assistance and guidance. Simple, clear, and accessible help features will empower users to make the most of the digital space you've created for them.

In addition, one thing that was slightly confusing was the idea of vaults. Maybe because there weren't enough figma screens to checkout a complete workflow for how a fully functioning vault might work but I wonder how someone might curate a vault: how would they select these journals? Are the vaults collaboratively curated with friends in the app? Can I also add other people's entries into the vault? I think these questions would have been clarified with a more detailed workflow for using the vault.

Beyond addressing the specific heuristic violations, we think it is important to consider the wide spectrum of users who will interact with your platform, particularly when the user base spans multiple generations. The design should cater to a diverse audience, from young children just learning to use technology, to tech-savvy children, to grandparents who may be engaging with a digital journaling platform for the first time. This means ensuring the interface is intuitive, inclusive, and accommodating to different levels of digital literacy. Maybe you can consider offering customization such as adjustable text sizes, contrast settings, and the ability to change icon labels can make the app more accessible to users with varying visual abilities and preferences. Other options may be to offer an onboarding experience, simplified navigation, and community support as well. A unique experience for people of different ages/generations might also be interesting to look at!

Putting down our critical hats, we want to say that it's a beautiful design and a great idea! Most of our critiques are nitpicks that should be easily fixed. We can see the time, effort, and thought put behind this. Keep up the great work, and we are excited to see how this project evolves!

Severity Ratings

- 0 not a usability problem
- 1- cosmetic problem
- 2 minor usability problem
- 3 major usability problem; important to fix
- 4 usability catastrophe; imperative to fix

Heuristics

H1: Visibility of System Status

• Keep users informed about what is going on

H2: Match Between System & Real World

- Speak the users' language
- Follow real world conventions

H3: User Control & Freedom

- "Exits" for mistaken choices, undo, redo
- Don't force down fixed paths

H4: Consistency & Standards

- Words, actions, and UI elements should be consistent across the entire platform
- Follow platform and industry conventions

H5: Error Prevention

- Minimize error-prone conditions
- Remove memory burdens, support undoing, and warn your users when necessary

H6: Recognition Rather Than Recall

• Make objects, actions, options, & directions visible or easily retrievable

H7: Flexibility & Efficiency of Use

- Accelerators for experts (e.g., gestures, keyboard shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

H8: Aesthetic & Minimalist Design

• No irrelevant information. Focus on the essentials.

H9: Help Users Recognize, Diagnose, & Recover from Errors

- Error messages in plain language
- Precisely indicate the problem
- Constructively suggest a solution

H10: Help & Documentation

- Easy to search
- Focused on the user's task
- List concrete steps to carry out
- Not too large

H11: Accessible

- Users can interact with the system using alternative input methods.
- Content is legible with distinguishable contrast and text size.
- Key information is upfront and not nested for screen readers.
- Purely visual or auditory content has text-based alternatives for users with low vision and low hearing.

H12: Value Alignment and Inclusion

- The design should encode values that users can understand and relate to.
- It should make a diverse group of users feel included and respected.
- The design should prevent the reproduction of pre-existing inequities and not create additional burdens for members of disadvantaged populations.