

## Heuristic Evaluation of **Noted**

### 1. Problem/Prototype Description

Noted is a music-based journaling application that allows people to pair their photos with songs to capture past memories in a modern and creative way, then reflect on these pairings or share them with friends.

### 2. Violations Found

#### *Task 1: Pair songs with photos*

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

- a. Task 1: Pair songs with photos
- b. Description: The “compose” tab, while minimalistic, doesn’t offer any guidance as to what is happening.
- c. Rationale: Users could be confused about their photo selection's impact. From this screen (which is the default screen when you load the app), a user would have no idea that pressing “compose” would pair their photo with a song.
- d. Suggested fix: Add some guidance or task flow description that explains you first choose a photo and then a song, and what that pairing will go on to do.

#### 2. H10 Help and documentation / Severity: 3 / Found by: A, C, D

- a. Task 1: Pair songs with photos
- b. Description: the button to continue with a photo says “compose” instead of a more common word that signifies continue.
- c. Rationale: People who often utilize mobile applications know specific words that convey specific functions, such as “post” or “profile”. I appreciate the commitment to musical terminology with “compose”, but it does not entirely convey the idea that pressing the button will, for starts, continue to the next screen, and, then, allow the user to pair the photo with a song.
- d. Suggested fix: Indicate somewhere what “compose” means. At the very least, this could mean a small message underneath that says “Continue to pair this photo with a song” Another option would be changing the terminology to something more familiar to users, such as “Create Pairing.”

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

- a. Task 1: Pair songs with photos
- b. Description: The page for choosing a song to pair with a photo has no instructions, rather saying “top songs” only.
- c. Rationale: A user may need help figuring out what to do on this page. There is no indication that a song is being chosen or for what it is being chosen.
- d. Suggested fix: Add some guidance that explains that the app wants the user to choose a song and that it is being chosen with the intent of being paired with the photo.

#### 4. H11 Accessible design / Severity: 2 / Found by: A, B, C, D

- a. Task 1: Pair songs with photos
  - b. Description: It is unclear as to whether the search bar is interactive or not and how it is used.
  - c. Rationale: Typically a search bar has some sort of placeholder text or more of an indication that it is a functional search bar.
  - d. Suggested fix: Add placeholder text that says something like “Search for a specific song here”. This would also serve to give more guidance as to what users should be doing on this page.
- 5. H6 Recognition rather than recall / Severity: 3 / Found by: A, B, D**
- a. Task 1: Pair songs with photos
  - b. Description: When choosing a song to pair with the photo, the vinyls are shown with covers of songs superimposed on them with no other information.
  - c. Rationale: It is entirely reasonable that the user doesn’t remember the names of the songs from the cover alone, so the user would be confused as to what songs these vinyl images were representing.
  - d. Suggested fix: Include the names of songs and maybe the names of the artists somewhere near the record to make the song selection process clear.
- 6. H3 User control and freedom / Severity: 3 / Found by: A, B**
- a. Task 1: Pair songs with photos.
  - b. Description: On the song selection page, there is a back button in the top left corner, but it is non-functional.
  - c. Rationale: A user may want to go back to choose a different photo, but it is impossible because the button does not work.
  - d. Suggested fix: Map the back button to return the user to the photo selection page
- 7. H4 Consistency and standards / Severity: 2 / Found by: A**
- a. Task 1: Pair songs with photos
  - b. Description: When the pairing’s permissions are switched from private to public, the navigation bar’s appearance changes slightly, moving downwards.
  - c. Rationale: Inconsistent navigation bar size will make the whole app feel less like a whole and more like several fragmented processes, which would make the user experience feel the same way.
  - d. Suggested fix: Decide on a standard navigation bar and make it consistent across all interactions within the app.
- 8. H11 Accessible design / Severity: 2 / Found by: A, B, D**
- a. Task 1: Pair songs with photos
  - b. Description: On the “share your thoughts” page, the photo and a disk are on the top of the screen, but you can’t see the entire vinyl because it is inside of the “record sleeve”/photograph. The lack of visibility of the record makes it even more difficult to know the name and artist of the song.
  - c. Rationale: For users unfamiliar with the song, having more identification as to what the track is would be helpful. Oftentimes, the art of a song does not represent or even hint at the name of the song or the artist.

- d. Suggested fix: Some sort of identifying text accompanying the image of the record would be helpful to users who may not be familiar with or may have forgotten the cover art of a song.

**9. H2 Match between system and real world / Severity: 2 / Found by: A, B, C, D**

- a. Task 1: Pair songs with photos.
- b. Description: On the “share your thoughts” page, there is a button at the bottom that says “done”, and there is little other guidance, especially if this exercise is meant to be done for the purpose of journaling.
- c. Rationale: “done” does entirely convey the idea that to continue past this page is to post or save content. This could confuse users as they may not understand that they are posting this content as opposed to saving it as a draft or something else.
- d. Suggested fix: Make the true function of the button more explicit through more clear labeling, maybe something along the lines of “save” or “post”, respectively.

**10. H12 Value alignment and inclusion / Severity: 3 / Found by: A, D**

- a. Task 1: Pair songs with photos
- b. Description: On the “share your thoughts” page, there is no explanation that this photo/song pairing and accompanying text are meant to serve as a journal entry.
- c. Rationale: “Share your thoughts” does not really convey the idea that this composition is intended to be a journal entry, which could be confusing to users.
- d. Suggested fix: Include more explanation either at the top of the screen or in the text box label that the accompanying text is meant to act as a journal entry and will also serve as a caption of sorts for the photo/song combination.

**11. H5 Error prevention / Severity: 2 / Found by: A**

- a. Task 1: Pair songs with photos
- b. Description: There is no warning when switching from a private to a public post and the interface does not change apart from the switch between the two options flipping.
- c. Rationale: Especially given the potentially sensitive information in a journal entry, protecting the user from making a mistake and accidentally setting the wrong permissions for a post should be of utmost importance to prevent unnecessary harm. Compound this with the fact that there is no current way to edit a post, and it could make for a very negative user experience.
- d. Suggested fix: Add a warning or UI change when a post is switched to public that explains implications.

**12. H1 Visibility of system status / Severity: 2 / Found by: A, B**

- a. Task 1: Pair songs with photos
- b. Description: Regardless of whether “public” or “private” is chosen for post permissions, the user is brought to the profile page. This tells the user that both public and private posts are visible here. There is no visual identifier between one or the other.
- c. Rationale: The user may want to see which of their posts are public and which are private and potentially change this status, and, right now, they cannot.
- d. Suggested fix: Add some sort of indicator that shows the visibility of posts, like maybe a small eye icon next to public posts.

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

- a. Task 1: Pair songs with photos
- b. Description: In the flow where you choose a photo from the camera roll and then set permissions to public, labels for all of the navigation bar options appear. This is not true for any other flow in the entire app as far as I can tell.
- c. Rationale: Users will value consistency in the app's navigation page to limit confusion and allow energy to be focused on recording memories. Moreover, labels flashing in and out can be distracting.
- d. Suggested fix: Choose to either have every label up at all times or to only have the current page's label up. A good compromise could be to always have the labels up, but when the user is on a specific page, that label is highlighted along with the icon already being highlighted.

**14. H1 Visibility of system status / Severity: 1 / Found by: B**

- a. Task: Pair songs to photos
- b. Problem Description: In the interface where the user can choose a photo, the photos do not change when clicking the different filters "No Screenshots," "Favorited", and "All."
- c. Rationale: Users may be confused if their photos have been filtered or not.
- d. Suggested Fix: Change the photos that appear for the different filters or give some sort of visual indicator that the displayed photos have been filtered.

**15. H1 Visibility of system status / Severity: 2 / Found by: B, D**

- a. Task: Pair songs to photos
- b. Problem Description: In the compose screen, there's already a photo on the page without having selected a photo, and it's unclear what exactly this photo is for.
- c. Rationale: Users haven't selected a photo at this point, so they may be confused why a photo is already there and what its purpose is.
- d. Suggested Fix: Change the photo to an empty box that says "your photo" or use some other visual indicator to show that this photo can be changed after you select or randomize a photo.

**16. H7 Flexibility and efficiency of use / Severity: 1 / Found by: B**

- a. Task: Pair songs to photos
- b. Problem Description: In the interface where the user can choose a photo, the icons for choosing a photo and choosing a random photo always have pop-up instructions when you hover over the icons.
- c. Rationale: Users who regularly use this feature may feel slowed down or put off by the same pop-ups, which are unnecessary for them.
- d. Suggested Fix: Incorporate the pop-ups for these icons only when the user first uses this feature, consider making the icons more obvious in what function they serve, or have a short label next to each icon explaining its function.

**17. H8 Aesthetic and minimalist design / Severity: 1 / Found by: B**

- a. Task: Pair songs to photos

- b. Problem Description: In the interface where the user can choose a photo, the filter “All” has a black fill and is on the very right, which is different from normal design standards that usually put default filters like “All” on the very left.
- c. Rationale: Users may be slightly thrown off by “All” being on the very right since that’s not the design standard.
- d. Suggested Fix: Put the “All” filter on the very left.

**18. H3 User Control and Freedom / Severity: 2 / Found by: C, D**

- a. Task: Pair songs to photos
- b. Problem Description: Composing a pair task offers no clear cancellation option.
- c. Rationale: If a user begins to compose a pairing and wants to cancel, they must press the back arrow multiple times, depending on which part of the task flow they are on.
- d. Suggested Fix: Include a cancel button.

**19. H5 Error Prevention / Severity: 3 / Found by: C**

- a. Task: Pair songs to photos
- b. Problem Description: The hover over feature for choosing or randomly generating photos is not compatible with a mobile application.
- c. Rationale: If users need to understand what these icons do, hovering over is not an option and they may click on a button they do not mean to.
- d. Suggested Fix: Add a description of each icon below it or change the icons to named buttons like “Choose Photo” and “Randomly Generate Photo.”

**20. H5: Error Prevention / Severity: 3 / Found by: C**

- a. Task: Pair songs to photos
- b. Problem Description: When selecting a song to pair with an image, tapping on a song takes the user directly to the next page without letting the user confirm their choices.
- c. Rationale: When scrolling through songs, it is common to accidentally tap one one without meaning. If this takes the user to a new page every time, it might be frustrating.
- d. Suggested Fix: Add a selection box and display the chosen song an image on this page, then include a “Next” button for the user to confirm their choices.

**21. H7 Flexibility and efficiency of use / Severity: 2 / Found by: C**

- a. Task: Pair songs to photos
- b. Problem Description: Records cannot be directly added to collections when composing them.
- c. Rationale: An expert user might want to create a record and automatically add it to a collection rather than adding it after.
- d. Suggested Fix: Include an optional “Add to Collection” field when composing a pairing.

**22. H10 Help and Documentation / Severity: 2 / Found by: C**

- a. Task: Pair songs to photos
- b. Problem Description: It is unclear what “No Screenshots” means when selecting a photo.
- c. Rationale: “No Screenshots” looks like a tab but it is not clear what that tab contains or why it is necessary.

- d. Suggested Fix: Depending on what purpose “No Screenshots” has, delete the tab, define its purpose, add “No Screenshots” as a rule somewhere else, or rename the tab.

**23. H12 Value Alignment and Inclusion / Severity: 2 / Found by: C**

- a. Task: Pair songs to photos
- b. Problem Description: No description of where a “public” or “private” pairing will be displayed or who will see it.
- c. Rationale: Noted values privacy of precious memories, but users may not understand who will see their pairings without clarification.
- d. Suggested Fix: Add a question mark icon next to the “private/public” switch that explains this function.

**24. H2 Match between system and the real world / Severity: 2 / Found by D**

- a. Description: The purpose of the search bar is not immediately clear or intuitive in the context of the song selection screen.
- b. Rationale: Users expect the search bar to function in a way that is familiar to them based on past experiences with other apps.
- c. Fix: Label the search bar with placeholder text such as "Search for songs" to clarify its intended use and enhance discoverability.

**25. H2 Match between system and the real world / Severity: 3 / Found by D**

- a. Description: The terminology used within the app, specifically "records," "latest hits," and "share your thoughts," is thematic but may not be immediately understood by all users.
- b. Rationale: While the language fits the journaling-music pairing theme of the app, it may not be clear to users that "records" refers to their journal entries, "latest hits" to recent or popular song selections, and "share your thoughts" to the act of writing a journal entry.
- c. Fix: Provide contextual clues or tooltips that explain these terms when first encountered. Alternatively, use more descriptive labels such as "Your Entries" and "Write Your Entry"

**26. H6 Recognition rather than recall / Severity: 1 / Found by D**

- a. Description: The regenerate button's icon (two arrows in a circle) is commonly associated with refresh actions and may not be understood as a means to load a new random photo.
- b. Rationale: Icons should be immediately recognizable and not rely on memory.
- c. Fix: Change the icon to better represent the action of loading a new random photo

Task 2: Share photo-song pairings with friends

**27. H2 Match between system and the real world / Severity: 2 / Found by: A, B, C, D**

- a. Task 2: Share photo-song pairings with friends
- b. Description: “Message” as a page title does not totally convey the fact that the second task is located on this tab. “Message” does not necessarily carry the same meaning as “share”.

- c. Rationale: If a user wants to share a pairing with a friend, they may just as easily think going to the “friends” tab is as reasonable a choice as the “messages” tab.
- d. Suggested fix: Put share options in the friend tab or “latest hits” section or somehow signify that sharing also happens in the messaging tab.

**28. H8 Aesthetic and minimalist design / Severity: 1 / Found by: A, C**

- a. Task 2: Share photo-song pairings with friends
- b. Description: In the chat screen with Jasmine, there is a profile photo next to Jasmine’s name at the top of the screen, but also a profile photo next to her message, which is redundant and makes the screen busier.
- c. Rationale: The traditional format for 1-on-1 messaging in an app (namely in iMessage) has a photo and name on the top of the screen as a title. These apps will not display user profile photos in front of each message, but rather a name. This is because users will easily become overwhelmed with too many of the same photos on the screen as messages add up. Also, from an aesthetic perspective, it looks odd to have the same profile photo again and again. Usually, profile photos in the chat are reserved for group chats, not 1-on-1 messaging.
- d. Suggested fix: Evaluate whether or not you want to show profile photos next to each message. .

**29. H4 Consistency and standards / Severity: 2 / Found by: A**

- a. Task 2: Share photo-song pairings with friends
- b. Description: In the chat screen with Jasmine is the first title of this sort that is seen in the entire application. The remainder of the app, in fact, does not really have titles explaining pages anywhere. Also, the title has no demarcation that distinguishes the title from the body of the chat.
- c. Rationale: The user could get confused by seeing an unfamiliar title format, which could result in the user thinking the title is interactive or simply not knowing how to proceed. Additionally, the user could get confused with what is title and what is chat.
- d. Suggested fix: Standardize titles throughout the app and add some sort of barrier between the titles and the body of the chat on this page.

**30. H10 Help and documentation / Severity: 3 / Found by: A, D**

- a. Task 2: Share photo-song pairings with friends
- b. Description: neither the icon nor the tab that allows users to choose a pairing offers any explanation as to what tapping a photo-song pairing will do.
- c. Rationale: Often, attachment buttons have a plus sign or arrow sort of indication along with them to signify that tapping them will result in adding an attachment. A user may be confused as to what the small record button does and why their photo-song roll appears when they tap the button.
- d. Suggested fix: Add a “+” indicator to the record icon to signify that tapping it will let the user add a photo-song pairing to their message.

**31. H3 User control and freedom / Severity: 3 / Found by: A**

- a. Task 2: Share photo-song pairings with friends

- b. Description: Once the “add record” button is tapped, the keyboard disappears, and there is no way to get off the tab and return to the keyboard view without choosing a record to attach.
- c. Rationale: Usually when adding an attachment on an app, a user would be familiar with the capability to return to the default keyboard view via an interaction that mimics a back button. This would be done without actually adding an attachment.
- d. Suggested fix: Allow the user to tap the record icon again to undo the selection to open the “add record” tab. This follows most messaging application conventions.

**32. H3 User control and freedom / Severity: 2 / Found by: A, B, D**

- a. Task 2: Share photo-song pairings with friends
- b. Description: After choosing a photo-song pairing attachment, there is no way to undo it and choose a different photo-song pairing attachment without either leaving the chat entirely or sending the message.
- c. Rationale: From other messaging applications, users will be familiar with the ability to remove an attachment after choosing it, which allows them to correct mistakes or change their mind on what attachments to include in a message. Without this function, the user will feel limited.

**33. H11 Accessible design / Severity: 2 / Found by: A**

- a. Task 2: Share photo-song pairings with friends
- b. Description: there is no way to interact with the photo-song pairing options apart from tapping one and having it become an attachment.
- c. Rationale: Users may have many posts and not remember either the photo, the song, or the accompanying journal entry.
- d. Suggested fix: Inside the photo-song selection tab, allow the user to play a brief audio snippet or see more information about a photo-song pairing to assist them in identifying the correct one to send to their friend.

**34. H4 Consistency and standards / Severity: 3 / Found by: A**

- a. Task 2: Share photo-song pairings with friends
- b. Description: A private post that I submitted earlier is available to share with a friend.
- c. Rationale: Users may be confused when a post they had thought was private is then sharable with a friend, especially if it has sensitive information that is entirely possible within the context of a journal entry.
- d. Suggested fix: Do not present users with private posts as an option to share with a friend.

**35. H1 Visibility of System Status / Severity: 3 / Found by: B**

- a. Task: Share photo/song pairings with others
- b. Problem Description: Checking off “See more” or “See less” does not change the photo-song pairings on the feed, so I’m not sure if I successfully changed the likelihood of the person appearing more or less in my photos.
- c. Rationale: Didn’t receive any indicator that checking off one of the options led to the feed being adjusted.

- d. Suggested Fix: Either visually represent that the feed has been adjusted by changing the photos to match “see more”/”see less” or have a pop-up message saying that the feed has been adjusted.

**36. H4 Consistency and standards / Severity: 1 / Found by: B**

- a. Task: Share photo/song pairings with others
- b. Problem Description: On the friends screen, after clicking the edit friends button, the capitalization in the text for “your ensemble” and the friend’s names is inconsistent.
- c. Rationale: Really minor issue, just some users who might be nitpicky or particular about the consistency in capitalization across text may not like it.
- d. Suggested Fix: Either make sure to capitalize all necessary text or change the text for dates to all lowercase.

**37. H5 Error Prevention / Severity: 2 / Found by: B**

- a. Task: Share photo/song pairings with others
- b. Problem Description: In the messages screen, after adding the photo-song pairing to share with your friend, there’s no way to indicate that you can’t send another song-photo pairing at the same time.
- c. Rationale: Users who click on the vinyl icon to add another photo-song pairing to the message will be confused when clicking the button doesn’t do anything.
- d. Suggested Fix: Gray out the button after the user has already selected a photo-song pairing to share and add an error message if they try to add another one in the same message.

**38. H6 Recognition rather than recall / Severity: 2 / Found by: B**

- a. Task: Share photo/song pairings with others
- b. Problem Description: On the friends screen, after clicking the edit friends button, I was confused by what the three dots by each friend meant.
- c. Rationale: The three dots are not a clear visual indicator for an editing action.
- d. Suggested Fix: Change the icon to something that more clearly implies an edit action, like a pencil.

**39. H6 Recognition rather than recall / Severity: 2 / Found by: B**

- a. Task: Share photo/song pairings with others
- b. Problem Description: The message icon on the bottom nav bar doesn’t clearly indicate it to be a place where you can share your songs with other people.
- c. Rationale: The message icon has a stronger connotation of supporting a function that allows people to chat with others rather than sending something like a photo-song pairing.
- d. Suggested Fix: Change the icon to something that more clearly implies a sending/sharing action, like a paper airplane or share icon.

**40. H10 Help and Documentation / Severity: 1 / Found by: B, C, D**

- a. Task: Share photo/song pairings with others
- b. Problem Description: This task with sharing song-photo pairings is missing a high-level help page.

- c. Rationale: There could be a high-level documentation page that answers frequently asked questions, goes over how to add friends, and share pairings. This could be useful because there isn't a clear visual indicator of how to go about these tasks.
- d. Suggested Fix: Add a high-level doc page

**41. H11 Accessible Design / Severity: 4 / Found by: B**

- a. Task: Share photo/song pairings with others
- b. Problem Description: On the friends feed screen with the song-photo pairings, it is hard to tell what the songs are on the vinyls because the words are cut off and hidden and for low-vision or blind users, they may not know who the people are in the photos.
- c. Rationale: Users, especially those with low vision, would have a hard time figuring out what song the photo is attached to and which of their friends may be in the photo.
- d. Suggested Fix: Add the name of the song, artist, and tags of each friend in the photo right below each song-photo pairing.

**42. H3 User control and freedom / Severity: 2 / Found by: B**

- a. Task: Share photo/song pairings with others
- b. Problem Description: When updating song-photo pairings with new thoughts, there's no way to delete or edit the thoughts you just added.
- c. Rationale: Users may want to delete or edit the updates they add.
- d. Suggested Fix: Add a delete or edit option to the updates.

**43. H1 Visibility of system status / Severity: 2 / Found by: C**

- a. Task: Share photo/song photos with others
- b. Problem Description: On the "Your Ensemble" screen, there is no easy way to see which friends you have already selected to "see more" or "see less" of.
- c. Rationale: Normally, when adjusting friend settings, there is an easy way to see which friends have unique settings (i.e. Instagram has different lists for Close Friends and for Blocked Users). Here, a user would need to individually click on each friend to see the status.
- d. Suggested Fix: Show the user if they have already selected to "see more" or "see less" of a friend before they click the three dot icon.

**44. H2 Match between system and the real world / Severity: 2 / Found by: C, D**

- a. Task: Share photo/song photos with others
- b. Problem Description: The icon in the top right corner of the friends screen is unclear.
- c. Rationale: Users may think this icon means "edit friends" or "write new message," as new message buttons are often in the top right corner and include a pen.
- d. Suggested Fix: Use a word instead of an icon or change the icon to a settings icon.

**45. H2 Match between system and the real world / Severity: 3 / Found by: C**

- a. Task: Share photo/song photos with others
- b. Problem Description: It is unclear if the photo/song pairings on the "Friends" screen is a feed or a place to view friends profiles.
- c. Rationale: The navigation tab is called "Friends" but the screen appears to show a feed of friends' pairings.
- d. Suggested Fix: Use the term "Feed" for the navigation bar if this is a feed of friends' pairings.

**46. H2 Match between system and the real world / Severity: 0 / Found by: C**

- a. Task: Share photo/song photos with others
- b. Problem Description: Keyboard includes “Go” button but no “Enter.”
- c. Rationale: The keyboard would likely change in your hifi prototype but it’s worth pointing out that most messaging apps would have an “Enter” button rather than “Go.”
- d. Suggested Fix: Replace “Go” with “Enter.”

**47. H4 Consistency and Standards / Severity: 2 / Found by: C**

- a. Task: Share photo/song photos with others
- b. Problem Description: The navigation bar uses the term “Friends” but one screen in that tab uses “Ensemble.”
- c. Rationale: Users may be confused by the different terminology if those terms mean the same thing.
- d. Suggested Fix: Use the term “Friends” for both the navigation bar and the screen.

**48. H7 Flexibility and efficiency of use / Severity: 4 / Found by: C**

- a. Task: Share photo/song photos with others
- b. Problem Description: There is seemingly no way to compose a new message on the messaging screen.
- c. Rationale: Users must be able to start new conversations with friends.
- d. Suggested Fix: Include a new message functionality under messages.

**49. H7 Flexibility and efficiency of use / Severity: 3 / Found by: C**

- a. Task: Share photo/song photos with others
- b. Problem Description: There is no way to search for specific conversations.
- c. Rationale: When the messages screen becomes crowded with messages, it is more efficient for the user to search for conversations than to scroll until they find the conversation.
- d. Suggested Fix: Include a search functionality under messages.

**50. [H2] Match between system and the real world / Severity: 2/ Found by D**

- a. Description: The CD icon may not be universally understood as a way to access photo/song pairings, especially given the decline in physical media's prevalence.
- b. Rationale: Icons should be intuitive and leverage metaphors that are familiar to the user.
- c. Fix: Replace the CD icon with a more contemporary symbol that represents music or pairing, such as a note or link icon.

**51. H2 Match between system and the real world / Severity: 3/ Found by D**

- a. Description: Sharing photos and songs through a direct messaging (DM) format may not align with users' expectations or habits, which often involve more social or broadcast-style sharing.
- b. Rationale: Users may expect sharing features to mirror real-world social interactions, where sharing memories like photos and music is often a one-to-many experience rather than one-to-one.

- c. Fix: Provide alternative sharing mechanisms that reflect common social sharing behaviors, such as posting to a feed, sharing to a group, or broadcasting to all friends, alongside the option for direct messaging.

**52. H11 Accessible design / Severity: 4/ Found by D**

- a. Description: The screens do not indicate if there are text alternatives for images or visual content, which is critical for users with visual impairments.
- b. Rationale: Providing text alternatives is essential for screen reader accessibility and compliance with accessibility standards.
- c. Fix: Ensure all images and visual content have descriptive alt text for screen readers.

*Task 3: Curate your memories*

**53. H12 Value alignment and inclusion / Severity: 4 / Found by: A**

- a. Task 3: Curate your memories
- b. Description: There is no capability to curate memories beyond reading them.
- c. Rationale: Curating memories is a task flow for the app, but I am struggling to find how to do that. Users would be similarly confused about how to curate their memories. It is obvious how to see the collections, but how are memories added to the collections? This lack of functionality seems to go against a core value of the app.
- d. Suggested fix: Add a “curate” button on the reflect page to provide the user with curation options and/or add categorization options when a post is being made in the first place.

**54. H3 User control and freedom / Severity: 3 / Found by: A, B, C**

- a. Task 3: Curate your memories
- b. Description: When you open a collection, there is no back button to return to the “reflect” page.
- c. Rationale: Users will be trapped on this sub-page if they want to leave, and the only way to get off of it is to entirely leave the “reflect” page. This is confusing and annoying for users.
- d. Suggested fix: Add a back button for the user to return to the “reflect” page.

**55. H4 Consistency and standards / Severity: 3 / Found by: A**

- a. Task 3: Curate your memories
- b. Description: Collections are ordered in a purely vertical format, whereas other listings of photo-song pairings have been offset and a mix of horizontality, namely in the “profile” tab under “latest hits”.
- c. Rationale: There is a lack of consistency in structure between these two pages that serve the same purpose of viewing pairings. This is cause for confusion for users who may be unsure as to whether each of these pages actually does the same thing.
- d. Suggested fix: Choose to structure lists of pairings either vertically or with the mix or horizontality, not both.

**56. H4 Consistency and standards / Severity: 2 / Found by: A, B, C**

- a. Task 3: Curate your memories

- b. Description: On the “reflect” page, the leading titles of “check this out!” and “browse collections” are the same size and boldness as sub-titles like the date of a post or the names of the collections.
- c. Rationale: Users will have a difficult time quickly judging the order of importance of text if it all looks the same visually, and may be confused as to what is truly a title.
- d. Suggested fix: Make titles bigger and bolder than subtitles.

**57. H6 Recognition rather than recall / Severity: 2 / Found by: A**

- a. Task 3: Curate your memories
- b. Description: On the “reflect” page, it is unclear that tapping on a collection will lead to seeing more about it.
- c. Rationale: Users are familiar with instructions or pointers that indicate tapping on something will enlarge it.
- d. Suggested fix: Include an “eye” or “enlarge” symbol along with each collection to signify that tapping one will serve that function. Alternatively, add a subtitle under “browse collections” that gives instructions. Another option is to add some depth in the form of a box with raised edges surrounding the pairings to make them look tappable as opposed to static information.

**58. H10 Help and documentation / Severity: 2 / Found by: A, D**

- a. Task 3: Curate your memories
- b. Description: On the “reflect” page, the first read is “check this out!” This is a very nondescript title for a call to action.
- c. Rationale: Users are expecting important information to be at the top of a page. This is the post the user just created, which makes it important, but why is “check it out!” the title? It does not give any instructions as to why the user is seeing the title.
- d. Suggested fix: Change “check this out!” to a more descriptive title “My latest memory”.

**59. H8 Aesthetic and minimalist design / Severity: 1 / Found by: A**

- a. Task 3: Curate your memories
- b. Description: On the “reflect” page, there is a gray divider bar between the top and bottom sections. This is the only divider bar in the entire application. Everywhere else, the sections of the app are very free-flowing.
- c. Rationale: The bar does not match the rest of the app’s design choices. It could be jarring to the user who has become familiar with a specific design language through their interactions with the app. This is a complex task and it introduces a new aesthetic choice.
- d. Suggested fix: Either remove the bar or add dividers between sections throughout the remainder of the app.

**60. H4 Consistency and standards / Severity: 2 / Found by: A**

- a. Task 3: Curate your memories
- b. Description: On the “reflect” page when you open a post, the way you return to “reflect” is by tapping an X button in the top right.
- c. Rationale: Everywhere else in the app, you go back to the previous screen by tapping a back arrow in the top left. The use of the X on the right side would be confusing for the user who has become familiar with the left arrow flow up until this point.

- d. Suggested fix: Choose either the left arrow or the right X and stay consistent with it.

**61. H5 Error prevention / Severity: 3 / Found by: A, D**

- a. Task 3: Curate your memories
- b. Description: In the “reflect” page, the user is given the option to “share more” on their post. This terminology is confusingly similar to Task 2, which is sharing photo-song pairings.
- c. Rationale: Users will be confused by two completely separate task flows sharing terminology. It is reasonable to assume that tapping “share more” will allow the user to share the post with friends, which is not the case.
- d. Suggested fix: Change terminology to be centered on another word, maybe “add” instead of “share”?

**62. H7 Flexibility and efficiency of use / Severity: 3 / Found by: A, D**

- a. Task 3: Curate your memories
- b. Description: In the “reflect” page, the user is given the option to “share more” to add more text to their post. Tapping on this button then yields a text box.
- c. Rationale: A button before being allowed to type anything is an unnecessary task that puts an excess burden on the user. It makes for a less efficient flow.
- d. Suggested fix: have an interactive text box on this page by default, and then change the “done” button to convey something about saving an update to the post.

**63. H4 Consistency and standards / Severity: 1 / Found by: B**

- a. Task: Rediscover old memories
- b. Problem Description: On the reflect screen, there is inconsistency between all the uncapitalized text on the screen and the text for “Sept 23, 2023,” where S is capitalized.
- c. Rationale: Really minor issue, just some users who might be nitpicky or particular about the consistency in capitalization across text may not like it.
- d. Suggested Fix: Either make sure to capitalize all necessary text or change the text for dates to all lowercase.

**64. H4 Consistency and standards / Severity: 3 / Found by: B**

- a. Task: Rediscover old memories
- b. Problem Description: On the reflect screen, I was confused if the song-photo pairing visual in the check this out section would link to anything.
- c. Rationale: I thought the vinyl song-photo pairing was clickable because all other instances of the vinyl song-photo pairing have been clickable and lead to an expanded view.
- d. Suggested Fix: Try using some sort of visual indicator to show that it’s not clickable or make it clickable and lead to a page that shows the date and thoughts.

**65. H8 Aesthetic and minimalist design / Severity: 2 / Found by: B**

- a. Task: Rediscover old memories
- b. Problem Description: On the browse collection part of the reflect screen, the overlap of two song-photo pairings for each collection makes a somewhat awkward shape and makes it look like there’s only 2 songs per collection.

- c. Rationale: Users can expect only 2 songs per collection or be confused by what pairings are inside the collection since the overlap makes it more difficult to see the photos and vinyls.
- d. Suggested Fix: Maybe represent the collection as a stack of song-photo pairings where there is one pairing on the top and has layers of “drop shadows” below it or represent the collection as a 2x2 grid like how Spotify shows albums without uploaded images for covers.

**66. H8 Aesthetic and minimalist design / Severity: 2 / Found by: B**

- a. Task: Rediscover old memories
- b. Problem Description: All the text weight and size looks the same for the reflect screen, like “browse collection” and “edm,” even though one is supposed to be a heading and one supposed to be a category within that section.
- c. Rationale: There should be a clear differentiation between headers, subtitles, and body text for the user to more easily interpret the text on the screen in hierarchies.
- d. Suggested Fix: Bold the section headings like “check this out” and “browse collection.”

**67. H11 Accessible Design / Severity: 4 / Found by: B**

- a. Task: Rediscover old memories
- b. Problem Description: On the profile screen, the songs on the vinyls are not very readable and some of the letters are cut-off.
- c. Rationale: Users, especially those with low vision, would have a hard time figuring out what song the photo is attached to when looking back on their memories.
- d. Suggested Fix: Add the name of the song and the artist right below each song-photo pairing.

**68. H11 Accessible Design / Severity: 2 / Found by: B**

- a. Task: Rediscover old memories
- b. Problem Description: On the reflect screen, the caption attached to the song-photo pairing in the “check this out” section is pretty small and cramped.
- c. Rationale: Users with low-vision may have a hard time reading the caption.
- d. Suggested Fix: Make font size slightly bigger and include space between lines.

**69. H4 Consistency and standards / Severity: 3 / Found by: B, D**

- a. Task: Rediscover old memories
- b. Problem Description: On the friends screen, I was confused if the song-photo pairing visuals would link to anything and clickable.
- c. Rationale: I thought the vinyl song-photo pairing was clickable because all other instances of the vinyl song-photo pairing have been clickable and lead to an expanded view.
- d. Suggested Fix: Make them clickable and lead to a page that shows the date and thoughts.

**70. H7 Flexibility and efficiency of use / Severity: 3 / Found by: C**

- a. Task: Rediscover old memories
- b. Problem Description: It seems like users can only view old memories suggested by Noted or in collections.

- c. Rationale: Some memories might not be in collections, but some users might want to rediscover them.
- d. Suggested Fix: Include a feature in which a user can navigate to all past memories on the reflect page.

**71. H2 Match between system and the real world / Severity: 3/ Found by D**

- a. Description: The "Explore a Collection" screen presents multiple stories as part of a collection, yet it's not clear where users should click to view individual stories or memories. The term "record" is used ambiguously.
- b. Rationale: Users should be able to intuitively understand how to navigate and select individual items within a collection without ambiguity. The term "record" and its presentation need to be intuitive and self-explanatory.
- c. Fix: Provide distinct visual cues or buttons for each story within the collection to clarify where to click. Consider renaming "records" to something more descriptive like "memory" or "entry" and use a layout that makes the interaction mechanism (e.g., clicking to expand a story) obvious.

**72. H2 Match between system and the real world / Severity: 3/ Found by D**

- a. Description: On the "Explore a Collection" screen, it's unclear if there is a difference in functionality or outcome when clicking on the music component versus the picture within each post. This distinction is not visually intuitive.
- b. Rationale: Users may expect different interactions with the music and picture components of a post, such as playing the song or enlarging the image, but the current design does not convey what actions are possible or what the outcomes of those actions might be.
- c. Fix: Differentiate between the clickable areas of the music and picture components and provide visual or textual indicators that hint at the action, such as a play icon over the music part and a magnifying glass over the picture. Tooltips or a brief onboarding tutorial could also help clarify the functionality.

*All Tasks*

**73. H1 Visibility of system status / Severity: 2 / Found by: C**

- a. All Tasks
- b. Problem Description: The screens do not include a title or an indication of where the user is in the app.
- c. Rationale: There is low visibility of system status, given that the only indication of where a user is in the system is the small text and icon on the navigation bar. It might be helpful to remind a user of which screen they are at the top of the screen where their eyes will be drawn to.
- d. Suggested Fix: Include titles of main pages included "Direct Messages," "Friends," and "Reflect."

**74. H2 Match between system and the real world / Severity: 1 / Found by: C**

- a. All tasks
- b. Problem Description: Profile does not include information about friends.

- c. Rationale: Subjective, but many apps that have friends or connections show that on each user's profile.
- d. Suggested Fix: Evaluate whether or not you want to include a friend count on each profile.

**75. H4 Consistency and standards / Severity: 3 / Found by: C**

- a. All tasks
- b. Problem Description: Pairings are referred to as "Records" on the profile page, but nowhere else in the system.
- c. Rationale: Users may be confused if pairings are called "Records" in one part of the system, but nowhere else.
- d. Suggested Fix: Use the term "Records" more consistently or not at all.

**76. H10 Help and Documentation / Severity: 2 / Found by: C, D**

- a. All tasks
- b. Problem Description: No "Help" or "About" page
- c. Rationale: There could be a high level documentation page that answers frequently asked questions, explains terminology, or talks about the purpose of the app.
- d. Suggested Fix: Add an "About" or "Help" page

**77. H11 Accessible Design / Severity: 1 / Found by: C, D**

- a. All tasks
- b. Problem Description: All pairings use songs, which may exclude those with auditory impairments.
- c. Rationale: This might only be relevant if users can stream songs in-app, but if Noted includes this functionality, those with auditory impairments will require a text or image-based way of listening to the song.
- d. Suggested Fix: If the system will include audio streaming, include lyrics (like Spotify lyrics feature).

**78. H4 Consistency and standards / Severity: 3 / Found by D**

- a. Description: The navigation bar icons, specifically the thought bubble and the book, lack intuitiveness and self-explanatory context which may lead to confusion regarding their function.
- b. Rationale: Icons in a navigation bar serve as direct visual cues for the associated functionality.
- c. Fix: Replace abstract icons with more universally recognized symbols.

**79. H4 Consistency and standards / Severity: 2/ Found by D**

- a. Description: The user interface has a mix of rounded and sharp-cornered elements, such as buttons and input fields, which may lead to a lack of visual consistency.
- b. Rationale: Consistent UI design elements foster a cohesive user experience.
- c. Fix: Standardize UI elements to have a consistent shape.

**80. H11 Accessible design / Severity: 2/ Found by D**

- a. Description: The contrast and size of the text within the app's interface are not very accessible. If the contrast is too low or the text size is too small, it may not be legible for users with visual impairments.

- b. Rationale: Accessible design is crucial to ensure that all users, including those with disabilities, can interact with the system effectively.
- c. Fix: Text size should meet accessibility standards for readability.

**81. H12 Value alignment and inclusion / Severity: 3 / Found by D**

- a. Description: Thinking about cultural sensitivity, the icons, imagery, and language used may not resonate with a diverse user base or might inadvertently exclude certain groups.
- b. Rationale: Designing with inclusivity in mind ensures that a wide audience can relate to and feel welcomed by the app.
- c. Fix: Consider the global diversity of music and imagery and adjust the interface to reflect a broad range of cultural contexts.

**82. H12 Value alignment and inclusion / Severity: 2 / Found by D**

- a. Description: The app's visual and textual content may not reflect a diverse range of cultures or musical tastes, potentially alienating some users.
- b. Rationale: An inclusive design should resonate with a diverse user base and represent a variety of cultures and interests.
- c. Fix: Incorporate a diverse set of images and genres in curated collections and latest hits to foster inclusivity.

**3. Summary of Violations**

A Google Sheet Template is provided [here](#) to help you calculate numbers.

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status		1	6	1		8
H2: Match Sys & World	1	1	4	6		12
H3: User Control			3	3		6
H4: Consistency & Standards		3	6	6		15
H5: Error Prevention			2	3		5
H6: Recognition not Recall		1	3	1		5
H7: Efficiency of Use		1	1	3	1	6
H8: Minimalist Design		3	2	1		6
H9: Help Users with Errors						0
H10: Help & Documentation		1	3	2		6
H11: Accessible		1	5		2	8
H12: Value Alignment & Inclusion			2	2	1	5
<b>Total Violations by Severity</b>	<b>1</b>	<b>12</b>	<b>37</b>	<b>28</b>	<b>4</b>	<b>82</b>

**Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)**

#### 4. Evaluation Statistics (in %)

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D
Sev. 0	0%	0%	100%	0%
Sev. 1	25%	50%	33.33333333%	25%
Sev. 2	43.24324324%	40.54054054%	37.83783784%	48.64864865%
Sev. 3	32.14285714%	21.42857143%	28.57142857%	39.28571429%
Sev. 4	25%	50%	25%	25%
<b>Total (sevs. 3 &amp; 4)</b>	31.25%	25%	28.125%	37.5%
<b>Total (all severity levels)</b>	35.36585366%	35.36585366%	34.14634146%	40.24390244%

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

#### 5. Summary Recommendations

*[merge the general recommendations you made here]*

We had a great time exploring Noted's unique concept and clean aesthetics. The core idea of turning the submitted photograph into a record sleeve and the chosen song into the record resonates incredibly well. The general vibe of the app gave a warm and fuzzy feeling, which is ideal for setting a safe space for journaling. Overall, the app effectively incorporated visuals like vinyl and language like "compose" and "latest hits" to show that the focus of the app is on music. This makes for a very clear definition of the musical themes within the app. Additionally, we have some larger questions regarding task flows and app values along with some minor adjustments related to labels and consistency. More specifically, we found the most violations of heuristics within H4: Consistency & Standards, H2: Match Sys & World, H1: Visibility of Status, and H11: Accessible, in that order.

To briefly discuss task-related overarching questions, Task 2 is nested too much within the "message" tab. To make it more visible as a feature, it could be more effective to make it possible within the flow of Task 1. With Task 3, we feel there could be more explanation as to what "curate" means in the context of the app. How does the user go about making their own collection (as seen in "browse collections")? Intuitively, the "browse selections" section feels like it is where we should be able to curate tasks. Task 3 could be accounted for within the same flow as Task 1, in that a user could tag/categorize pairings as they are creating and posting them.

One common thought is that we think it would have been helpful to have some sort of label near the photo-song pairings, especially because often it can be confusing to determine the name and artist of a song just given the cover photograph, additionally, we want users with low-vision to have the ability to use a screen reader to read aloud the song title for them. We also found that the biggest downside to the musical messaging is the lack of clarity as to what should be done on each page. At a high level, it might be productive to include an about page that defines your system terminology (i.e. what does it mean to "compose," what is a "collection," how is that different from a "record") and use that

terminology more consistently across the system (i.e. a button might say “compose a record” or “create a collection” instead of just “compose” or “create”). With that, implementing titles at the top of pages to act as context to help the user understand what they should do. While this might detract from the minimalist aesthetic, it will be valuable to the user’s general understanding throughout their experience. We are generally concerned about the experience for users who are not digital natives or those who come from diverse cultural backgrounds. Overall, the app would benefit from a greater emphasis on inclusivity and accessibility, making sure that all users can utilize it to the fullest, regardless of background or ability.

Now, to focus on non-task feedback, we found the “friends” section to be unclear, even after reading the README. It seemed like a feed of records, but it was not clear who posted the records or why exactly they were there. It would be helpful if you could make this page’s status as a feed by identifying it in some way with a title. Was that screen related to the “share photo/song pairings with others” task? Or is that task more relevant to the “messages” tab? Also, is there a way to send friends your photo-song pairing from this page specifically? Or, can records only be sent by finding them in the “messages” tab? What is “see more” / “see less” supposed to do? We understand this is not a task flow and may not be entirely built out, but we are intrigued and it was unclear as to where we would be seeing more or less of this person’s posts.

### ***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.