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# **Heuristic Evaluation of Record**

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

# 1. Problem/Prototype Description

Record, a music-based journaling app developed by Team Record, enables users to make journal entries that capture the current emotions or thoughts associated with the songs they're currently listening to.

## 2. Violations Found

Simple Task: Swiftly record a journal entry.

- 1. H2 Match between system and the real world / Severity: 1 / Found by: A
  - a. Description: "Your emotions" tab in check-in summary orders emotions in order 2,
     1. 3.
  - b. Rationale: Users may be confused by why the second most prevalent emotion is listed first, then the most prevalent, then the third most prevalent.
  - c. Fix: It seems like the emotion in the middle is supposed to be a bit bigger than the other two, but maybe exaggerating the height/size of the bigger one so it looks more different would be more intuitive, since the similarity currently is a little confusing.
- 2. H5 Error prevention / Severity: 2 / Found by: A
  - a. Description: "Let's find something for your day" is an unclear ask for users. What is "something"? What does "for your day" mean?
  - b. Rationale: Users may be confused about what action they are supposed to take on this page.
  - c. Fix: Change header of page to a clearer question or ask, like "What song fits your mood?"
- 3. H1 Visibility of system status / Severity: 1 / Found by: A
  - a. Description: After clicking the plus button to add a song, the song selected is replaced by a new one.
  - b. Rationale: Since the song immediately disappears, there could be some confusion about whether that specific song was actually added to the playlist.
  - c. Fix: Would be nice if the song stayed put and the plus turned into a colored check to signify that it was successfully added, in addition to the notification at the bottom.
- 4. H5 Error prevention / Severity: 1 / Found by: A
  - a. Description: After clicking the text box in "What are you thinking?" page, entire text box shifts up screen
  - b. Rationale: The unexpected shift in the text entry space could lead to typing errors for the user.

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- c. Fix: Ensure that the text box stays in the same place throughout the entire user interaction.
- 5. H3 User control and freedom / Severity: 3 / Found by: A
  - a. Description: After clicking into the text box in "What are you thinking?" page, there is no way to go back out of the text box.
  - b. Rationale: Users cannot undo this action and go back to the original page.
  - c. Fix: Add a back button to allow users to leave the text entry box.
- 6. H6. Recognition rather than recall / Severity: 3 / Found by: A
  - a. Description: After clicking into the text box in "What are you thinking?" page, the question disappears and is replaced by the date.
  - b. Rationale: User is expected to remember what question they are trying to answer. User may be confused about what they are supposed to be answering.
  - c. Fix: Keep the question as the header instead of the date.
- 7. H3 User control and freedom / Severity: 3 / Found by: A
  - a. Description: After finishing typing in the text box in "What are you thinking?" page, there is no clear way to submit the text.
  - b. Rationale: There is no way for the user to submit their text entry.
  - c. Fix: Add a "Submit" button.
- 8. H1 Visibility of system status / Severity: 1 / Found by: A
  - a. Description: After clicking "Finish" at the end of the check-in process, there is no notification to indicate that the responses have been recorded and the playlists/stats are processing/generating.
  - b. Rationale: User could be confused about whether their entries were recorded or not.
  - c. Fix: Add a page/pop-up that says "Responses recorded! Generating your playlist..." or similar.
- 9. H5 Error prevention/ Severity: 2 / Found by: B

**Task:** Swiftly record a journal entry, beginning screen

**Description:** The small toggle at the very opening screen after you open the app makes the user think that they can do something with the toggle like view more days or maybe some advanced options with the calendar. The first thing I did as a user was try to press it but was confused when there was no response.

**Rationale:** Users may be confused and try to press it when trying to select a date on the calendar.

**Fix:** Remove the toggle or label its functionality.

10. H5 Error prevention/ Severity 2 / Found by: B, C

**Task:** Swiftly record a journal entry, rating emotions through emojis

**Description:** Confusing at first how to set a rating for the emoji emotions or what setting a rating looks like. Users may be confused about whether they have to type a response because the "set rating" inside of the box makes it seem like there will be some form of text input involved but it actually translates to dragging something to be a percentage.

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**Rationale:** Users may be confused on how to set a rating or what type of rubric they should be basing their rating off of. A scale of 1 to 10? A word? A percentage?

**Fix:** If you want users to set a percentage to indicate how they are feeling, you can mimic the design of the question where you asked how a user was feeling on a scale from good to bad and indicate the presence of a slider where one end is labeled as 0% and the other is labeled as 100%.

11. H5 Error Prevention / Severity 1 / Found by: B, C

**Task:** Swiftly record a journal entry, looking for music and adding to today's songs **Description:** It is confusing when a user adds a song and the banner message at the bottom stating "Added to today's songs" includes the "i" symbol because it's usually associated with being able to click something for additional information or with error messages that require a user to read more information.

**Rationale:** Users might expect to be able to click the information icon or think that an error may have occurred.

**Fix:** Either replace the "i" symbol with a check to show that a task has been completed rather than that the user can access additional information, or allow the user to click the "i" symbol to view a full list of their songs for the day.

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

Task: Swiftly record a journal entry, button to start the process

**Description:** Light gray text on gradient blue/purple button

**Rationale:** The light gray text "Record today's entry" is a little hard to see on the blue section of the button gradient and in general. The light gray with the blue background makes the user have to strain more to see the text as they blend in a bit.

**Fix:** Make the text white. Because the text is smaller than "check-in", it is still clear that it is supposed to be a sub-header.

13. H5 Error prevention / Severity 2 / Found by: B

**Task:** Swiftly record a journal entry, navigating from nav bar to journal

**Description:** When clicking on the journal icon in the bottom nav bar, the user is taken to a page where their journal entry is displayed alongside with a purple button that prompts them to check in and "record today's emotions"

Rationale: It is slightly confusing that the app re-prompts the user to record their day's emotions even after they already wrote a journal entry for the day (which is displayed on the screen). Does the fact that the button is still there mean that you can record multiple journal entries a day? Is this button meant to indicate that you can edit your existing journal entry? Its purpose is a bit confusing since a journal entry has already been created and therefore the user has already recorded their emotions for the day. This might lead to users misunderstanding its purpose and possibly overwriting or changing their journal entry when they didn't mean to.

Fix: Relabel the button to make its purpose clearer. Based on what you intend it do to, it might say something like "Record another entry for today" or "Edit today's entry"

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14. H2 Match between system and the real world / Severity 1 / Found by: B

**Task:** Swiftly record a journal entry, writing portion

**Description:** The format of the journal feels very similar to writing in the notes app rather than immediately very similar to writing in a physical journal.

**Rationale:** There is no usability issue, but there is an opportunity to enhance the user's experience and make them feel more like they are slowing down and writing in a journal rather than just passively writing or jotting something down on their phone or feel as if they are just writing into a form of google doc.

**Fix:** Allow some personalization that mimics real journal writing. Perhaps people can change the font to make it look more like handwriting and less like typed text, they can add a signature at the bottom of the page like sometimes people do in diaries, or maybe even add drawings or pictures to their entries to mimic when people doodle in the margins of their journals.

#### 15. H8 Accessible design / Severity 3 / Found by: B

**Task:** Swiftly record a journal entry, the writing portion of the entry

**Description:** The page where a user can input their journal entry consists of a black and light gray background with very light gray writing. The black background overpowers the focus that is meant to be on the writing and makes the user strain more to see their journal entry.

**Rationale:** The screen is overwhelmingly dark which makes the writing, especially since it's small, difficult to focus on. It's easier to see and focus on dark text with a light background than vice versa. You have to strain to see the light text, especially since it is slightly gray so it contrasts less with the background.

Fix: Make the background for the text box white (or a light color) and make the text black.

#### 16. H12 Value alignment / Severity 2 / Found by: B

**Task:** Swiftly record a journal entry, the writing portion of the entry

**Rationale:** One of the mentioned values for the group was ensuring that the app does not have a negative effect on the feelings of its users. When a user is prompted to enter a journal entry, the environment and screen that they are provided when they do so may affect how they approach their entry. Looking at a very dark screen, composed mainly of black, shades of gray, and some white may set up an environment with sad undertones rather than a neutral-feeling space for people to write. The dark screen is a bit overwhelming in terms of the mood it sets up. **Fix:** Make the journaling screen more neutral with its colors, balancing out dark and light colors. A possible fix is incorporating more white into the screen.

#### 17. H3 User control and freedom / Severity 2 / Found by: B

**Task:** Swiftly record a journal entry, saving progress

**Description:** There is no option to save progress for a partially finished entry.

**Rationale:** Journaling may not always be a continuous process and a user may want to resume a partially finished journal entry (ex: maybe they just rank their emoji emotions and want to continue later), but there is no option to save an entry in the middle, just to submit after you

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have finished it completely, possibly causing users to have to restart their entry multiple times if they do not have time to finish it in one attempt.

**Fix:** Add a save button to each screen of the journal.

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

**Task:** Swiftly record a journal entry, editing response of current's day's journal (also applies to task #2)

**Description:** The "edit response" option after you submit your journal entry feels a bit hidden and is not emphasized enough. It is transparent in terms of its background and has a thin outline.

**Rationale:** When observing the summary for the day's journal entry, color emphasis is super prominent. Emphasis is mainly placed on the "listen now" button and on the emojis. Being at the very bottom and not having any color associated with it, the edit response button is not a first read, and is somewhat easy to glance over (it kind of blends into the background) even though it may be a popular action that users want to take.

**Fix:** Provide additional emphasis to the "edit response" button using color so that a user notices it more easily.

19. H11 Accessible design / Severity 2 / Found by: B, D

**Task:** Swiftly record a journal entry, visual impairment

**Description:** There is a typing option but for individuals who may have vision impairments an audio message option may be easier but is not available.

**Rationale:** Audio messages are more intuitive and accessible for many people who have difficulty seeing small text on screens or who have a form of vision impairments, and they may prefer to record or audio transcribe their journal entry, especially since unlike most apps, Record involves a significant amount of writing.

**Fix:** Provide an option to audio record or audio transcribe a journal entry.

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

**Task:** Swiftly record a journal entry, listening to music while writing

**Description:** It is unclear whether you can listen to the music that you select while you are writing your journal entry. Currently it seems that a user cannot listen to the music they chose until after they have submitted every single part of their entry or at least the option to do so is not clear.

**Rationale:** Users may want to listen to the music that they selected while writing their journal as a way to calm themselves down or set the mood, but would be unable to with the current design.

**Fix:** Place a play button at the top of the screen where users write their journal so that they have the option to listen to their curated playlist while they are writing.

- 21. H2 Match Between System and the Real World / Severity: 2 / Found by: C, D
  - a. Task: Swiftly record a journal entry.

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- b. Description: Taskbar icon for journal screen is somewhat ambiguous—I wasn't sure what it was at first.
- c. Rationale: Users may have a hard time logging/viewing a journal entry if they're not sure where to find the journal screen.
- d. Fix: Edit the icon so that it's more obviously a journal (e.g., add a pencil, choose an icon where the journal is slightly open)
- 22. H4 Consistency and Standards / Severity: 2 / Found by: C
  - a. Task: Swiftly record a journal entry.
  - Description: When creating/viewing an entry, the user's picture is shown in the upper right corner. However, clicking it does not lead to any information/profile being displayed.
  - c. Rationale: The presence of a profile picture typically indicates a profile feature, or at least a way to change it. A user may try to access their profile or change their picture by clicking it.
  - d. Fix: Implement some sort of profile/way to edit profile picture.
- 23. H7 Flexibility and Efficiency of Use / Severity: 2 / Found by: C
  - a. Task: Swiftly record a journal entry.
  - b. Description: On the journal screen, there is no option to edit your entry.
  - c. Rationale: Since the journal screen should be a comprehensive overview of all the things you can do with an entry, there should be a button/shortcut to edit the entry.
  - d. Fix: Add a shortcut to edit the entry on the journal screen.
- 24. H8 Aesthetic and Minimalist Design / Severity: 1 / Found by: C
  - a. Task: Swiftly record a journal entry.
  - b. Description: This is on the nitpicky side, but when the user is returned to the home screen after creating a new entry, the entry seems to be a bit oddly placed (i.e.., the emojis are cut off). I've attached a screenshot below.

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- c. Rationale: The user should be able to either see the full entry or be able to drag the bottom sheet (which should only show the playlist and/or entry) up.
- d. Fix: Adjust the positioning of the bottom sheet after the user creates an entry.
- 25. H8 Aesthetic and Minimalist Design / Severity: 1 / Found by: C
  - a. Task: Swiftly record a journal entry.
  - b. Description: When the user is typing their journal entry, the space between the top and sides is not the same.
  - c. Rationale: This is purely aesthetic, but the user may get distracted by the slight deviation in spacing.
  - d. Make the top and side padding of the text input box equal.

## 26. H10 Help and documentation / Severity: 2 / Found by: D

**Description:** It is unclear which metadata fields of the song get searched for by the query term that we type into the 'Search for songs' box.

**Rationale:** A user might try searching for a song by its album name only to find that the search results only matched their search term to song and artist name. In another scenario, a person might not remember the name of a song and want to search by lyric. **Fix:** Replace 'Search for songs' with something like 'Search for artists, songs, lyrics, and album names.'

# 27. H6 Recognition rather than recall / Severity: 3 / Found by: D

**Description:** There is no indication of the recent song selected on the 'What are you thinking?' page.

**Rationale:** The song we selected feels like an important part of the journaling process. In this case, the user has to remember that they selected "Halo" by Beyonce, which

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could distract from their journaling.

Fix: Indicate the selected song underneath the 'What are you thinking?' header.

# 28. H5 Error prevention / Severity: 2 / Found by: D

**Description:** There is probably a character limit on the memo written in the 'Write something here...' box, but it is not indicated. (If not, it would be nice to have.)

**Rationale:** If the user surpasses a character limit, their post could fail on the backend. It would also be helpful aesthetically to have a limit on the length of journals such that they can be displayed consistently.

*Fix:* Indicate the live character count as the user types above the top right corner of the text input box (e.g. 132/1200 characters).

# Moderate Task: Review and modify a journal entry from a previous day.

- 29. H3 User control and freedom / Severity: 3 / Found by: D, A
  - a. Description: When clicking and dragging the journal details for the date chosen, there is no ability to drag back down to choose a different date.
  - b. Rationale: No way for user to undo action if they choose the wrong date.
  - c. Fix: Allow user to drag the journal details back down to choose a different date to modify.
- 30. H4 Consistency and standards / Severity: 1 / Found by: A
  - a. Description: The "What are you thinking?" page has a header that is not in past tense, while the other pages' headers have been modified to reflect that they are about a past date.
  - b. Rationale: Other pages use past tense/make reference to the fact that they're referring to a past date. User might mistakenly think that they are supposed to write about what they are currently thinking about.
  - c. Fix: Change the header to "What was on your mind?" or similar.
- 31. H7 Flexibility and efficiency of use / Severity: 2 / Found by: A, B
  - a. Description: No way to skip to the specific response page you want to edit.
  - b. Rationale: Users have to click through until they get to the one they want to edit.
  - c. Fix: Allow users to skip to the page they would like to edit.
- 32. H4 Consistency and standards / Severity: 1 / Found by: A
  - a. Description: On the page to add songs to the past day's playlist, the playlist is still called "Playlist of the day" in the purple box.
  - Rationale: This is the same notation as the actual current day's playlist confusing for user as to which day's playlist they are looking at.
  - c. Fix: Maybe change the current day's playlist header to "Today's playlist" and past dates' playlists to "Playlist for [Date]".
- 33. H1 Visibility of System Status / Severity 2 / Found by: B

**Task:** Review and modify a journal entry from a previous day

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**Description:** There is no additional screen after you edit the journal entry from a previous day, rather a user is taken back to the calendar with no indication of whether their journal entry was successfully updated or not.

**Rationale:** Without a clear message that their journal was successfully edited and updated, users might have to do an extra step of checking over their journal entry again to make sure that their change is actually there.

**Fix:** After a user edits an entry, provide a quick pop-up that indicates whether their edits were successfully recorded or not. Something like "You successfully updated your entry."

34. H7 Flexibility and efficiency of use / Severity 2 / Found by: B

**Task:** Review and modify a journal entry from a previous day

**Description:** When viewing recommended songs to add to their journal entries, users are only able to view two songs at a time and must swipe left to view more.

**Rationale:** Only being able to view two songs at a time and having to swipe across the screen to view two more decreases the efficiency of searching for songs and requires more effort from the user. If they want to browse a lot, only being able to see two songs at a time and having to swipe constantly (moving their finger across the screen and back over and over) may make this process frustrating.

**Fix:** Provide more space in the screen, or even possibly allow users to click on something that brings up a pop up, so that users can view more than two songs at a time. Also, vertical scroll is more intuitive and faster than having to swipe left or right because you don't have to move your finger as much.

#### 35. H6 Recognition rather than recall / Severity 2 / Found by: B

**Task:** Review and modify a journal entry from a previous day, identifying existing entries **Description:** There is no clear indicator on the calendar for which days have a journal entry associated with them and which do not.

**Rationale:** Rather than having to remember whether they created a journal entry for a specific day, users should be able to quickly scan the calendar and be given a visual indicator for which days they recorded a journal and which they didn't. Otherwise, they may have to do extensive trial and error when trying to click on days to see if they wrote a journal entry for them. This might be especially confusing if there is no error or message telling them that there isn't a journal associated with the date they are clicking.

**Fix:** Shade in all of the dates that have a journal entry associated with them.

- 36. H2 Match Between System and the Real World / Severity: 1 / Found by: C
  - a. Task: Review and modify a journal entry from a previous day.
  - b. Description: The button that the user taps to edit a previous entry says "Edit Responses" rather than "Edit Entry."
  - c. Rationale: This is on the nitpicky side, but to keep things consistent, as well as to establish a logical order, having the button say "Edit Entry" makes more sense

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than "Edit Responses" since the plurality of "responses" could imply that the user can make changes to multiple entries by clicking this button.

- d. Fix: Change "Edit Responses" to "Edit Entry"
- 37. H8 Aesthetic and Minimalist Design / Severity: 1 / Found by: C
  - a. Task: Review and modify a journal entry from a previous day.
  - b. Description: The section titled "Your emotions" seems a bit cluttered, and the spacing between different elements is very small. It contains both the emoji and the emotion name.
  - c. Rationale: Compared to the rest of the screen, this part seems a bit busy. Including the emoji along with the emotion name seems a bit redundant since they express the same thing.
  - d. Fix: Remove the name of the emotion (e.g., Happy, Sad). The emoji itself should be clear enough to show what emotion is being displayed.
- 38. H8 Aesthetic and Minimalist Design / Severity: 1 / Found by: C
  - a. Task: Review and modify a journal entry from a previous day.
  - b. Description: On the entry viewing screen, there are white numbers underneath the emojis that dictate the top 3 emotions, along with the emotion's percentage.
  - c. Rationale: The white numbers seem redundant as the percentages already convey that the three emotions shown are the top 3. Additionally, the top emotion's emoji is the biggest, which is already another indicator of the emotion rankings.
  - d. Fix: Remove the white numbers, or adjust the size so it's smaller and more evenly spaced.
- 39. H8 Aesthetic and Minimalist Design / Severity: 1 / Found by: C
  - a. Task: Review and modify a journal entry from a previous day.
  - Description: When changing the date to access a previous entry, the date picker uses two blue lines to separate the currently chosen month and year from the rest.
  - c. Rationale: This is definitely subjective, but the blue lines seem a bit redundant since the text colors (white vs gray) already indicate which month and year are currently selected. They also differ a bit from the app's intended aesthetic.
  - d. Fix: Remove them to further simplify the UI.

# STOPPING AND ONLY LOOKING AT SEVERITY 3 BEYOND THIS POINT!!!!! We should go back and look at these later tho!

- 40. H12 Value Alignment and Inclusion / Severity: 2 / Found by: C
  - a. Task: Review and modify a journal entry from a previous day.
  - b. Description: Users are able to edit the emotions section of past entries.
  - c. Rationale: I'm not sure if this feature is conducive to keeping an accurate record of a user's emotions—it's hard to accurately recall the emotions you felt on a specific day in the past. Additionally, users may go back to edit their logged emotions to seem more "positive" or "negative," which could be detrimental if they're using this app to keep a log of their mental health.
  - d. Fix: Remove/adjust the ability to edit the emotion section of past entries.

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## 41. H1 Visibility of System Status / Severity: 2 / Found by: C

- a. Task: Review and modify a journal entry from a previous day.
- b. Description: The screens where the user is editing a past journal entry seem almost identical to the screens where they're creating a new entry, save for a change in question tense.
- c. Rationale: It would be helpful to distinguish between the different task flows more, especially because new users may be confused by editing vs logging a new entry.
- d. Fix: Add a subheader along the lines of "Editing post from [date]"

# 42. H7 Flexibility and efficiency of user / Severity: 3 / Found by: D

**Description:** It is not entirely obvious that the user can hold and drag up on the section at the bottom of the page to see more information about the post.

**Rationale:** A novice user might expect to be able to tap on the card to see more details since the drag gesture is not introduced in another place on the app.

**Fix:** It would be helpful to either include a tutorial that teaches the gesture to the user, or a horizontal line at the top of the black card that nudges the user to swipe up (similar to the horizontal line at the bottom of the iPhone screen). I personally got stuck on this section until I went back to look at the instructions in the README document.

# 43. H8 Aesthetic and minimalist design / Severity: 1 / Found by: D

**Description:** '~1 month ago' doesn't really provide any information in addition to 'Wed October 24.'

**Rationale:** I can't think of a scenario where the user wouldn't be able to figure that information out from the date provided below it. Therefore, it is probably unnecessary. **Fix:** Omit this information from the card's header.

#### 44. H11 Accessible design / Severity: 1 / Found by: D

**Description:** The font on the journal entry could be a bit small for vision-impaired users.

**Rationale:** The app could be more inclusive to vision-impaired users if reading text wasn't the only way to review an old journal entry.

**Fix:** It could be nice to include a text-to-speech feature when reviewing past journal entries.

# Complex task: Contemplate emotions over time.

- 45. H4 Consistency and standards / Severity: 3 / Found by: D, A, B
  - a. Description: Date picker at top of screen corresponds to the dates for line graph directly below, but the bottom box addresses "Happiness over the week."
  - b. Rationale: Users could be confused about what week this is in reference to, since the date range selected at the top is more than a week.
  - c. Fix: Clarify what dates are being analyzed for each section of the page.
- 46. H4 Consistency and standards / Severity: 1 / Found by: A
  - a. Description: Header for "Happiness over the week" same font size and color as the "on average" descriptor.

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- b. Rationale: Header is not distinguishable from the descriptor text, which is a hierarchy that is present elsewhere in the app.
- c. Fix: Adhere to font hierarchies throughout the platform.
- 47. H4 Consistency and standards / Severity: 1 / Found by: A
  - a. Description: No header for the line graph at the top of the page.
  - b. Rationale: Other sections on the page have a label/header.
  - c. Fix: Add a header to this section.
- 48. H4 Consistency and standards / Severity: 1 / Found by: A
  - a. Description: Emotion reporting header less bolded and smaller than emotion categories.
  - b. Rationale: Font does not reflect hierarchy of information.
  - c. Fix: Adjust font size and bolding to reflect that one is a header and the others are categories.
- 49. H4 Consistency and standards / Severity: 1 / Found by: A
  - a. Description: Emotion categories represented via text instead of emoji icons.
  - b. Rationale: App uses emoji icons in line graph on top and on other pages.
  - c. Fix: Change to emoji icons for consistency.
- 50. H4 Consistency and standards / Severity: 1 / Found by: A
  - a. Description: The use of purple is unclear/inconsistent. The bottom two graphs use only purple, but the top graph uses purple for one line and blue for the other.
  - b. Rationale: The meaning of the color purple in the visualization of the data is not the same throughout the page.
  - c. Fix: Change the colors to correspond more closely with intended meaning or along a consistent color scheme.
- 51. H4 Consistency and standards / Severity: 2 / Found by: A
  - a. Description: No y-axis values for first two graphs.
  - b. Rationale: Usually, data analytics like this provide y-axis values or some other way for users to interpret the different heights of bar/line graphs.
  - c. Fix: Add y-axis values.
- 52. H11 Accessible design / Severity: 1 / Found by: A
  - a. Description: Font size of headers small and difficult to read.
  - b. Rationale: Visually-impaired people would have an especially difficult time reading the small headers.
  - c. Fix: Make font size bigger.
- 53. H11 Accessible design / Severity: 1 / Found by: A
  - a. Description: Green arrow for happiness trend too small.
  - b. Rationale: Visually-impaired people would have an especially difficult time seeing the small arrow.
  - c. Fix: Make arrow bigger.
- 54. H4 Consistency and standards / Severity: 1 / Found by: A
  - a. Description: Only the second graph has a trend metric, while the other graphs do not.

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- b. Rationale: No clear reason why the analysis presented is not consistent across graphs.
- c. Fix: Either remove the trend metric or put them on all of the graphs.

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

- a. Description: Datepicker on this page is different from the one on main page.
- b. Rationale: There is inconsistency in the platform for how users select dates, which may be confusing but is at least unnecessary mental load.
- c. Fix: Choose one datepicker style/functionality to use throughout app.
- 56. H4 Consistency and standards / Severity 1 / Found by: B, D

**Tasks:** Contemplate emotions over time

**Description**: When a user is prompted to choose a date range, the starting and ending point for the date range are the only two dates highlighted.

Rationale: Previously, when a date has been selected on the calendar with a circle, it has meant that a user is viewing information for a single day. In the context of the trends page it may be unclear whether you are viewing data only for those two highlighted days (just like how it works throughout the rest of the app) or for all of the ones in between as well. This might make users confused and cause some trial and error before they realize that they can only click two dates because they are selecting a time range that includes everything between the two circles.

Fix: Apart from highlighting the two endpoints with circles, when a user is selecting a date range it may be helpful to highlight all of the days whose data will be used for the trends page. Not everything should be highlighted with circles, the circles should be reserved for the endpoints to make them clear, but a light gray highlighting for all of the boxes in between may be helpful to the user. Here is an example of what I mean:

https://www.reddit.com/r/FigmaDesign/comments/120wl03/help\_keeping\_dates\_aligned\_in\_a\_r esponsive/

57. H12 Value Alignment / Severity 2 / Found by: B

**Task:** Viewing emotional trends over time

**Description:** The trends/stats for negative emotions are often a first read. For example, sad is often the first emotion shown on the summaries in the trends pages.

**Rationale:** In terms of how the platform displays users' emotions, it may be interesting to consider how the format and order that you display emotions may negatively affect users. For example, highlighting sadness first before other emotions may make users hyper aware of how bad their week was in a bad way.

**Fix:** Make negative emotions a second or third read, make happy emotions the first thing they see. Highlight improvements in their emotions.

- 58. H8 Aesthetic and Minimalist Design / Severity: 3 / Found by: C
  - a. Task: Contemplate emotions over time.
  - b. Description: The date picker on the trends screen doesn't vary in color, which makes it difficult to distinguish between different dates.

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- c. Rationale: When selecting dates, the user may have a hard time finding and choosing a specific date since all the dates look identical. For example, I had a hard time finding the first day of September on the calendar.
- d. Fix: Make the dates that aren't part of the current month a gray color, and keep the dates that are part of the current month white.
- 59. H8 Aesthetic and Minimalist Design / Severity: 1 / Found by: C
  - a. Task: Contemplate emotions over time.
  - b. Description: The font sizes are all the same when using the date picker.
  - c. Rationale: Headers/more important information should be larger, so they're more easily noticed by the user.
  - d. Fix: Make the font size of the month and year larger than the rest of the text.

# 60. H4 Consistency and standards / Severity: 1 / Found by: D

**Description:** Unclear what week the 'Happiness over the week' card is referring to on the 'Trends' page.

**Rationale:** The user may have a hard time figuring out what date the week being graphed out started and ended on. Additionally, the '60%' point on the graph above appears to be on the 'Sadness' line, which makes it unclear whether the 'Happiness' week being displayed is controlled by the point above or not.

**Fix:** Add a header above the card similar to the one above the top card that indicates which days are included in the week.

# 61. H7 Flexibility and efficiency of user / Severity: 2 / Found by: D

**Description:** It is not entirely obvious that the user can exit the date picker by tapping anywhere outside of it on the screen.

**Rationale:** While an expert user would enjoy the ability to tap anywhere outside of the date picker to exit, a novice user might not find this intuitive. Therefore, you might consider adding some flexibility by still allowing the user to exit by tapping anywhere outside of the date picker, but also adding a simple way to exit.

**Fix:** In addition to tapping out of the date picker, perhaps you could include an 'X' button at the top left or right of the date picker that allows the user to exit.

#### 62. H7 Flexibility and efficiency of user / Severity: 2 / Found by: D

**Description:** Without reading the README, it is not entirely obvious that there is more content below the 'Happiness over week' graph.

**Rationale:** While an expert user might intuitively know to scroll down, a novice user might benefit from an indication that there is more scrollable content below.

**Fix:** Add a small transparent arrow point down that indicates to the user that there is more content below.

#### 63. H3 User control and freedom / Severity: 1 / Found by: D

**Description:** No way to guickly return to current date on date picker.

**Rationale:** A user might set a range that is far in the past but want to see their recent trends again. It could be slightly inconvenient for the user to have to manually find today's date again.

Fix: Add a 'Reset' button that moves the date picker back to a recent default date range.

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# 64. H1 Visibility of system status / Severity: 2 / Found by: D

**Description:** If the date range spans several months, it is unclear which bubble is indicating the start of the range vs. the end of the range.

**Rationale:** The calendar has two bubbles around September 27 and 30, but the range could be from Sep 2023 - Dec 2023 as indicated in the icon that pulled up the date picker. After switching months the user could get confused about whether they are tapping a start date or an end date on the calendar because there is no indication of which bubble is which.

**Fix:** The start and end date bubbles could be made to be different colors in order to indicate their difference. Additionally, it could be helpful if all the dates included in the selected range were highlighted to indicate that they have been selected. Alternatively, you could use text to indicate start and end dates at the top of the date picker.

# Violations from both simple and moderate tasks

- 65. H2 Match between system and the real world / Severity: 3 / Found by: A, B
  - a. Description: On "How are you feeling?" page, unclear about what the percentages for each emoji mean.
  - b. Rationale: What does it mean to be 75% happy and 50% sad? Not super intuitive in terms of how people think about their mix of emotions.
  - c. Fix: Maybe try some other way to allow users to indicate their emotional state.
- 66. H3 User control and freedom / Severity: 3 / Found by: A, C, D
  - a. Description: On the "Let's find something for your day" page, there is no way to undo the action of adding a song to today's songs.
  - b. Rationale: User cannot unadd the song if they add it and change their mind, or they add it by accident.
  - c. Fix: Add an "undo" button to the notification that pops up after the song is added.
- 67. H6 Recognition rather than recall / Severity: 3 / Found by: A, C, D
  - a. Description: There is no way to see what songs already added in playlist after adding.
  - b. Rationale: User is expected to remember which songs they have already added.
  - c. Fix: Somehow display songs that have already been added on the page.

#### Violations from all tasks

- 68. H10 Help and documentation / Severity: 3 / Found by: A, D
  - a. Description: No text on icons in bottom bar.
  - b. Rationale: Users might not understand what each page's main function is. It is especially unclear what the second to left icon means.
  - c. Fix: Add text or clearer icons to signify each page's functionality.
- 69. H9 Help users recognize, diagnose, and recover from errors / Severity: 4 / Found by: A

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- a. Description: If users tap second to left icon on bottom bar, then go back to home page, data input from previous check in is not saved.
- b. Rationale: If users accidentally tap the second to left icon in the bottom bar in the middle of their check-in, their progress will be lost without any warning or ability to undo the action.
- c. Fix: Notify users that exiting the check-in process will result in their work being lost.
- 70. H11 Accessible design / Severity: 3 / Found by: A, B
  - a. Description: The journal entry portion featured on the day overview on the home page does not have a header.
  - b. Rationale: People using the app with screen readers may not realize what the text they are hearing is supposed to be.
  - c. Fix: Add a header.
- 71. H11 Consistency and standards / Severity: 1 / Found by: A
  - a. Description: In second bottom bar tab page, subtitle of "Check-in" box is "Record today's emotions," but is "Record today's entry" on homepage.
  - b. Rationale: Headers for same section not consistent across app.
  - c. Fix: Change headers to be the same.
- 72. H5 Error prevention / Severity: 3 / Found by: A, D
  - a. Description: Calendar on homepage is colored purple, which in other places on app indicates a call to action. Calendar is also majority of screen during part of check-in process.
  - b. Rationale: Users attempting to check-in may accidentally interact with the calendar instead of the actual check-in questionnaire.
  - c. Fix: Make calendar a less prominent feature of the homepage.
- 73. H8 Aesthetic and minimalist design / Severity: 3 / Found by: A, D
  - a. Description: Calendar is bright purple and the majority of homescreen.
  - b. Rationale: Attention drawn to information that is not the most important on the page makes the app seem like a calendar app.
  - c. Fix: Make calendar a less prominent feature of the homepage.
- 74. H8 Aesthetic and minimalist design / Severity: 1 / Found by: A
  - a. Description: Wed November 28 is written twice on the homepage.
  - b. Rationale: Redundant date information on homepage takes up space.
  - c. Fix: Remove duplicate date.
- 75. H11 Accessible design / Severity 1 / Found by: B

Task: All Tasks

**Description:** Text for the journal entry and non-header text in sections like Trends is small and therefore difficult to see at times.

**Rationale:** Small text may be difficult to see for people with poor vision which might prevent them from being able to comfortably use the app.

**Fix:** Slightly increase text size.

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76. H6 Recognition rather than recall / Severity 3 / Found by: B, D

Task: All tasks

**Description:** It is not clear that the bottom block with the user's name and profile picture can be dragged up.

**Rationale:** The bottom block looks like it is an extension of the footer, so it is unclear that the user can drag it up, an important confusion because key information is accessed by dragging it. Without dragging it up, users can't see information such as their journal entries and emotion ranking, oftentimes you can just see the "listen now" button.

**Fix:** Make it clear that the bottom tab can/should be dragged up by placing an indicator such as an upwards arrow or grip dots.

#### 77. H11 Accessible Design / Severity 2 / Found by: B

Task: All tasks

**Description:** General screens often have very dark colors which make some icons, sectioning, and text more difficult to see.

**Rationale:** Some users, especially possible older users, may have issues distinguishing elements of the screens because of how dark everything is.

**Fix:** Provide the option for a dark mode and a light mode, so that users can choose to have black backgrounds for all of the app screens if they find it more aesthetic or easier to read (often the case with young users), but so that users who find that the dark background makes the app's content difficult to see or distinguish, can have a light mode accessible.

#### 78. H4 Consistency and Standards / Severity 2 / Found by: B

**Task:** General, at the start of the app when you haven't made a journal entry for the day yet **Description:** If you haven't made a journal entry for the day yet, you can't drag up the bottom bar/card like you can in almost all other scenarios.

Rationale: It makes sense that the card would not be dragged up because there is no additional data to show, but users may get confused as to why they can drag it up sometimes and sometimes not, they might forget if they logged a journal entry for the day and want to check, but be confused when they can't drag the card up. They might think it's an error with the app.

Fix: Make it so that you can drag the bottom bar/card up in all scenarios and instead of

displaying data when someone hasn't made an entry yet (since there isn't any yet), you can display a message like "no entry for today yet." This way it is consistent in terms of the fact that you can always drag the bottom card up and there is clear communication as to why or why not it might be empty.

#### 79. H10 Help and Documentation / Severity: 3 Found by: C, B

- a. Task: Swiftly record a journal entry / Review and modify a journal entry from a previous day.
- b. Description: The app lacks a section that explains the app's functionality/FAQs.
- c. Rationale: New users, as well as infrequent users, may need a centralized place to find information on how to use the app.
- d. Fix: Add a page that answers FAQs or explains certain features.

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# 80. H1 Visibility of system status / Severity: 3 / Found by: D, C

**Description:** It is unclear what the second icon from the left in the bottom navigation bar represents.

**Rationale:** The icon looks like a credit card, which is not an obvious representation of 'Today.' Overall, it is also unclear to me what the purpose of the 'Today' section is in the app.

*Fix:* Use a clearer icon (maybe a calendar) or omit the section altogether.

# 81. H11 Accessible design / Severity: 1 / Found by: D

**Description:** The shades of blue and purple used for accents are difficult to see by users with color vision deficiency.

**Rationale:** I have red-green color deficiency and didn't realize that the first graph on the trends page contained multiple colored lines.

**Fix:** Use higher contrast colors when trying to indicate differences between elements on the page.

# 3. Summary of Violations

A Google Sheet Template is provided <u>here</u> 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	0	2	3	1	0	6
H2: Match Sys & World	0	3	1	1	0	5
H3: User Control	0	1	2	4	0	7
H4: Consistency & Standards	0	11	3	1	0	15
H5: Error Prevention	0	2	5	1	0	8
H6: Recognition not Recall	0	0	1	4	0	5
H7: Efficiency of Use	0	0	5	1	0	6
H8: Minimalist Design	0	9	1	3	0	13
H9: Help Users with Errors	0	0	0	0	1	1
H10: Help & Documentation	0	0	1	2	0	3
H11: Accessible	0	6	2	1	0	9
H12: Value Alignment & Inclusion	0	0	3	0	0	3
Total Violations by Severity	О	34	27	19	1	81

*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)

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# 4. Evaluation Statistics (in %)

Severity /	Evaluator A	Evaluator B	Evaluator C	Evaluator D
Evaluator				
Sev. 1				18%
Ex: Eval A count / total	 	44.700/	22.520/	
sevs 1 in table #3	50	11.76%	23.53%	
Sev. 2				22%
Ex: Eval A count / total	44 4444444	   FE E CO/	22 220/	
sevs 2 in table #3	11.11111111	55.56%	22.22%	
Sev. 3				21%
Ex: Eval A count / total	0045700474	04 500/	00.000/	
sevs 3 in table #3	63.15789474	31.58%	26.32%	
Sev. 4				0%
Ex: Eval A count / total	100		00/	
sevs 4 in table #3	100	0	0%	
Total (sevs. 3 & 4)				20%
Ex: Eval A = sum(sev 3:				
sev 4 counts) / sum(sev			<b></b> 0/	
3: sev 4 in table #3)	65	30%	25%	
Total				21%
(all severity levels)				
Ex: Eval A total sev				
count / total sevs (green				
cell) in table #3	40.74074074	30.86%	23.46	

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

# **5. Summary Recommendations**

Great work! We all thoroughly enjoyed testing Record's med-fi prototype. In general, the design is beautiful, simple, and intuitive. There were a few trends in our heuristic evaluations that we wanted to address:

First, a lot of our comments were for H4: Consistency and Standards. The plus side of this is that none of these violations had super high severity ratings. However, the high number of these small violations means that the cumulative effect is that the app is not as sophisticated as it could be. Addressing these consistency issues could go a long way in terms of making your app that much more enjoyable to interact with!

The next largest area of potential improvement relates to H8 (Aesthetics & design) where the readability and how clearly emphasized some important features were. For example, one of the things we discussed in our group was that the "edit journal" button was difficult to notice and was easily missed by several people. Additionally, the font, size, and colors with some pages on the app were difficult to read and see. At times, especially for the journal entry, it felt like descriptive headers or titles were missing. One of the major points in our group was that

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the journal icon was not clear and that it was not clear at times based on icons what you could drag. It was mentioned in our group that several people didn't know that you could/should drag up the bottom bar.

Third, we noticed a fair number of violations of H5 (Error prevention). Some of the prompts could be made more specific about what the user action is expected, e.g. Replace "Let's find something for your day" with "Select a song for your day" and a character limit count added to "Write something here..." Additionally, some of the gestures expected to be made by the user such as toggling the calendar date, sliding the emotion percentages, and tapping the 'i' icon on 'Added to today's song' toast were not entirely intuitive.

As for feedback that's not directly related to heuristic violations, one of the things we noticed was the overall confusion surrounding the journal screen. It seems as though most of its features can be accessed directly from the home screen, and there are features concerning journal entries that can *only* be accessed from the home screen (i.e., Editing past journal entries). Since the home screen is the first thing that the user sees when opening the app, the journal screen might seem redundant. We think that the journal screen could be revamped so that it entices users to use it more—for example, being able to view the complete playlist for today's journal entry. Another concern we had that's not directly related to heuristics is the reasoning behind why a user should be able to edit past entries—journaling tends to be a way to preserve the thoughts and feelings that exist at the moment that the entry is being written. By allowing the user to edit past entries, especially those from a long time ago, the authenticity of entries could potentially be compromised. Nice job, overall!

# **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

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#### 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.

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• 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.