# **Heuristic Evaluation of ALTiO**

## 1. Problem/Prototype Description

ALTiO is a social media platform that allows users to create drawings as visual interpretations of audio, post their selected audio and visual supplements, and browse other people’s content.

## 2. Violations Found

### H1: Visibility of system status

1. **H1: Visibility of system status / Severity: 1 / Found by: B**  
   Tab status: It was unclear that the first feed that we encountered (after the onboarding directions) was the home feed. As I was navigating through tabs, I wanted to get back to that screen but didn’t realize that it was the home tab until trial by error. It was generally unclear visually what tab I was on.

Suggested fix: a color change/icon highlight on the tab icons to indicate which tab we are on.

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

Screen 36

Problem: There is no change in content when the user toggles between the “hot,” “new,” and “top” audio categories.   
Fix: Change the displayed content when the user toggles between the “hot,” “new,” and “top” audio categories.

1. **H1: Visibility of System Status / Severity: 1 / Found by: C**  
   It is unclear that something has been successfully posted or is in the process of posting once you finish a creation. Users may be unclear on the status of their intended post.  
   Fix: Provide users with a “posting in progress” and/or indication of successful post.

### H2: Match Between System and the Real World

1. **H2: Match Between System and the Real World / Severity: 1 / Found by: A**  
   Screen 44  
   Problem: The term “most frequented tags” is confusing. What does “most frequented” mean in terms of the user and other users on the app?   
   Fix: Explain what “most frequented” means or use a different term.
2. **H2: Match Between System and the Real World / Severity: 1 / Found by: A**  
   Screen 21  
   Problem: using the abbreviation “CC” to stand for closed captions might be confusing to those unfamiliar with the term.   
   Fix: spell out “closed captions” in all references.
3. **H2: Match Between System and the Real World / Severity: 1 / Found by: A, E**  
   Screen 4, 30, Onboarding “You can clarify your drawings…elements of your ALTiO.”  
   Problem: The app references “your ALTiO” and prompts the user for “your ALTiO’s name” and to “give your ALTiO a caption,” but the experience never explained what an ALTiO is. Is a drawing automatically an ALTiO, or is there more to it?  
   Fix: Explain somewhere in onboarding or on the screen what an ALTiO is, and use the term consistently (replacing art/audio)

### H3: User Control and Freedom

1. **H3: User Control and Freedom / Severity: 3 / Found by: A, B, C**  
   Multiple screens   
   Problem: Multiple screens are missing back buttons. For example, there is no back button on the expanded view of the post, the expanded view of the tag screen, or the onboarding screens, which makes it challenging for users to navigate through the app and return to their previous position.   
   Fix: Add a back button on the expanded view of the post
2. **H3: User Control and Freedom / Severity: 4 / Found by: A, B**  
   “Create” screens  
   Problem: In the “create” flow, users can select a video and choose an audio to accompany it. However, if users select an audio first, there is no prompt to select a video to accompany it. This inconsistency is confusing and constrains the user from being able to upload both a video and an audio if the audio is uploaded first.   
   Fix: Allow users to select an audio and choose a video to accompany it.
3. **H3: User Control and Freedom / Severity: 3 / Found by: A, B**“Draw” screens   
   Problem: There is no “redo” button when the user is drawing.   
   Fix: Add a “redo” button.
4. **H3: User Control and Freedom / Severity: 2 / Found by: C**  
   The “X” button on the create/draw page is located below “Select” and the undo button. Normally an “X” exit/quit button while creating something like a post on Instagram is located at the very top left corner of the screen. Users may not immediately identify that this is a quit button because of where it is currently located.  
   Fix: Move the X button to the top left corner or as far top left as possible to resemble most other social media content creation screens.

### H4: Consistency and Standards

1. **H4: Consistency and Standards / Severity: 2 / Found by:** **A**Multiple screens

Problem: The text box borders on several screens make them look like they are clickable buttons. For example, on the welcome screen, the borders around the text “Welcome to” and “Reimagining audio for everyone” have the exact same shape as the clickable “Let’s get started” button, except the first two text boxes are not clickable, which causes confusion for the user when trying to navigate the app’s buttons. This also happens in the expanded view of the post, where the text box border on the text “[BECAUSE LOVE CAN BURN LIKE A CIGARETTE]” makes it seem like a clickable button when it isn’t clickable. This is an issue throughout the app.

Fix: Remove the border around text that is not clickable.

1. **H4: Consistency and Standards / Severity: 2 / Found by: A, B**

Screen 8

Problem: In the expanded view of the post, it’s unclear that the user can switch views between the drawing and the audio by tapping on the alternate content card in the top right corner. This is because the app uses a rounded border radius to indicate buttons and clickability, but the content card has sharp corners, which makes it appear to be unclickable.   
Fix: Make the alternate content card look clickable or add a helpful popup tip.

1. **H4: Consistency and standards / Severity: 1 / Found by: A, B**  
   Screen 32  
   Problem: On the search page, a user would expect to be able to search for whatever they want, like someone’s username, a location, or tags. Instead, the search button takes the user to a “topics for you” page, which is unexpected. It appears the user can only search for tags, which feels limiting given that the app is a social networking platform with several other searchable categories.   
   Fix: Change the “empty state” of search from “topics for you” to something that encourages users to search. Allow users to search for usernames, locations, and tags.
2. **H4: Consistency and Standards / Severity: 1 / Found by: A, B, C**  
   Multiple screens (screens 35, 37)  
   Problem: the “back” buttons on several pages have inconsistent design: on one screen, it is white with text that says “Go Back,” on another screen, it is black with text that says “Back,” and on another screen, it is black in the shape of an arrow with text that says “Back.” This inconsistent design may confuse users or be distracting for the user’s experience.   
   Fix: Make all the “Back” buttons stylistically consistent with the same icon shape and text.
3. **H4: Consistency and Standards / Severity: 1 / Found by: A**  
   Screen 36  
   Problem: There is an “i” icon in the bottom right corner of all album covers on the “explore audios” screen, which suggests that tapping on the album cover will reveal more information. However, tapping on the album cover takes you to a “confirm your audio” page, which is inconsistent with the user’s expectation.   
   Fix: Remove the “i” icon, or display more information about the audio when the album cover is clicked.
4. **H4: Consistency and Standards / Severity: 4 / Found by: A**  
   Screens 36, 37  
   Problem: the “explore audios” page shows several album covers, indicating the albums from which to choose audios from. However, when the user clicks to select the album, it takes the user to a “confirm audio” page, which is misleading because the user has only selected the album, not a specific song from the album.   
   Fix: Allow the user to select a specific song from the album.
5. **H4: Consistency and standards / Severity: 2 / Found by: E**

Description: the bar on top of the home page feels like it should be a search bar, but there’s nothing indicating it as such, and it’s not interactable.

Rationale: I think it’s a pretty standard location for a search bar — thinking of browsers. I see the Search on the bottom and am confused.

Fix: label it as a search bar if that’s what it is, or use the space differently if it’s not.

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

Description: on #R&B page, options are audio and art.

Rationale: Again, inconsistency when referring to drawings.

Fix: use ALTiO as the other tab (and get the pun across!)

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

Description: on the @USER\_NAME page, it’s #RNB, but when clicked on, it’s #R&B

Rationale: inconsistent, slightly confusing

Fix: choose one (R&B seems to recur in other places?)

1. **H4: Consistency and standards / Severity: 2 / Found by: E**

Description: on the art tab of #R&B, scrolling all the way down leads to the bottom ALTiOs being covered up by the bottom menu bar.

Rationale: I can’t see everything! The audio tab didn’t have this problem.

Fix: match the audio tab

*Note: it’s a bit jarring for me to see the content below the menu bar as I scroll — maybe make that area opaque?*

1. **H4: Consistency and standards / Severity: 2 / Found by: E**

Description: on the #R&B screen, the audio tab shows “vibe” and “drawing features,” but these don’t seem to show up anywhere else

Rationale: I don’t understand where these features come from. I don’t seem to be able to do anything with them, either.

Fix: remove these, or user them consistently across all screens

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

Description: on the “confirm your audio” page, the text in the buttons becomes Title Case

Rationale: on all previous screens, they’ve been all lowercase

Fix: make it consistent (I like the lower case, FWIW!)

1. **H4: Consistency and standards / Severity: 3 / Found by: B, E**

Description: being told to draw my ALTiO at different time points

Rationale: so these have some sort of time element as well, like a video? I hadn’t seen that in any of the posts I looked at — they all seemed to be interpreting the overall audio, not accompanying specific parts

Fix: remove this wording, or clarify how to move through time when viewing posts

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

Description: on “done drawing” screen, buttons again are Title Case

Rationale: inconsistent

Fix: change to lower case

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

Description: on “upload your audio” screen, Go Back button is Title Case

Rationale: inconsistent

Fix: change to lower case

1. **H4: Consistency / Severity: 1 / Found by: C**The app sometimes features the language “Annotations” and other times “Comments” to describe the additional details provided by a poster. This internally inconsistent language could confuse the user.  
   Fix: Select either (although I recommend annotations since those have a stronger connotation with adding information to images) and be consistent throughout the app.
2. **H4: Consistency / Severity: 2 / Found by: B, C**  
   When you click continue after drawing something in the “Create” stage it asks you “Done drawing?” and provides 3 options, beginning with “No.” Usually a question like this is accompanied by a “Back” option (maybe “No, back to drawing”) and the “No” alone provides little indication of what clicking “No” will entail.  
   Fix: Include the word “Back” or “Continue” to indicate that selecting “No” will return the user to the drawing stage.
3. **H4: Consistency and standards / Severity: 2 / Found by: B**Descriptions in the audio list vs. art list on search tab: (explore flow)   
   When looking at the audio list, there is key information about the title, artist, and tags related to a song, but the art tab simply relies on the album cover to tie it to a drawing. To view that information again, I have to go back and forth between the lists and keep checking, and if I forget what the information was, I have only the album cover to rely on to find the information again.

Suggested fix: carry over this informational text to the art list!

1. **H4: Consistency and standards / Severity: 2** / **Found by: B**  
   Emphasis of drawing vs. video on home feed: (post flow)   
   From the example page, I had trouble distinguishing which was the default focus. How can I tell the difference between a drawing and a video/album cover? I noticed from the slides that there is now an option to post without audio content, and for posts to have/not have interpretations. How am I supposed to tell the difference on the home page?  
   Suggested fix: decide on what to emphasize (if there is one consistent feature that is part of these posts) or use text/color to denote what kind of post it may be (i.e. music with drawing, video without audio, a post without a drawing, etc.)

### H5: Error Prevention

1. **H5: Error Prevention / Severity: 1 / Found by: A**  
   Screen 4  
   Problem: On the onboarding screen about clarifying drawings, the user can click “continue” before tapping on the “1,” “2,” and “3” buttons that reveal drawing clarifications, and there is no indication that the buttons on the drawing are even clickable. This means the user can easily skip this onboarding screen without understanding this crucial aspect of the app.

Fix: Add an instruction that says “tap on the buttons on the drawing to proceed” and don’t let the user continue until they’ve tapped the 3 buttons

1. **H5: Error Prevention / Severity: 4 / Found by: A, C**  
   “Create” screens   
   Problem: When in the process of creating a post, a user can click the “search” or “home” buttons, which immediately takes the user to a different screen without confirmation or asking whether the user would like to save the draft. This is problematic because the user has to start the upload process from scratch if they intentionally or unintentionally click out of the create flow.   
   Fix: Ask if the user wants to save their draft if they navigate away from the upload process.
2. **H5: Error prevention / Severity: 2 / Found by: B, E**

Description: being told to make sure my CCs are accurate

Rationale: if I’m using audio that others have also used (a song from the app itself), why does every person have to make sure they’re correct? What if I find a mistake that a previous poster didn’t, does their post get updated?

Fix: skip this step if not necessary, or remove feature

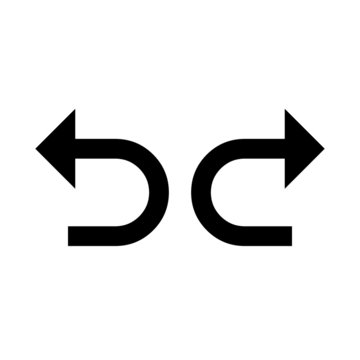
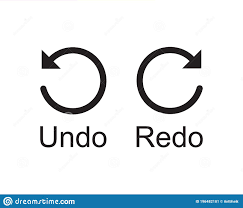
1. **H5: Error prevention / Severity: 1 / Found by: B, E**

Description: when editing CCs, how do I know the format?

Rationale: Does a line show from all times between the timestamps? What if I want empty space? What if I make a typo? If I want to do something non-standard I don’t know how to do it.

Fix: add some sort of validation here

### H6: Recognition not Recall

1. **H6: Recognition not Recall / Severity: 1 / Found by: A**  
   Onboarding screens  
   Problem: It’s not possible to access the onboarding screens after reviewing them once. This means that a user cannot review the onboarding flow after the first time.   
   Fix: Make the onboarding flow visible and accessible from anywhere in the app.
2. **H6: Recognition not Recall / Severity: 3 / Found by: B, C**During the “create” task flow, the status or stage only includes “select” “draw” and “post” when there are multiple substages within “select” including selecting video content, audio and captions. Not including the substages visibly requires the user to recall where in the “select” stage they are and what is to come based on prior experience.  
   Fix: Add a visual mapping to the substages in addition to the main 3 stages or convert the process from 3 to 5 stages to include the 3 parts of “select” as their own stages.
3. **H6: Recognition over recall / Severity: 1 / Found by: B**Undo button in drawing: (create post flow)  
   Very confused about the undo icon when drawing. For me, I associated the icon with “refresh” and assumed it would just restart the drawing, only to tap and see that it undid my line. Perhaps others would have the same association as me.  
   Suggested fix: choose a more common icon for undo, one extremely common one I find is something like this:  
     
   The current icon is just one undo button, perhaps it would be intuitive to have undo and redo, for error protection. Button labels are also another option.

### H7: Flexibility and Efficiency of Use

1. **H7: Flexibility and Efficiency of Use / Severity: 1 / Found by: A**  
   Screen 44  
   Problem: There is no at-a-glance view of the user’s posts in profile view, which means the only way to find a post or peruse your own posts is to scroll the entire collection of the user’s posts. This becomes cumbersome as the user adds more photos.   
   Fix: Add a “grid view” for the user’s photos
2. **H7: Flexibility and Efficiency of Use / Severity: 1 / Found by: A**

Screen 36  
Problem: The explore audios page doesn’t allow customization, even though users might have a preferred genre of audio or a frequently selected genre of audio.   
Fix: Sort audios by genre based on the user’s historical selections.

1. **H7: Flexibility / Severity: 2 / Found by: C**  
   The current user flow of the tutorial requires the user to view each screen of the tutorial. Some users may wish to skip through the tutorial for various reasons like already having familiarity with the app.  
   Fix: Provide an option to skip the tutorial.
2. **H7: Flexibility and efficiency of use / Severity: 1 / Found by: B**  
   Closed caption editing (create post flow)

I was unsure of how this function may seem to different users. For those who are not as experienced with detailed and accurate closed caption editing, they might accidentally make edits that are not accurate to the audio itself, or may feel overwhelmed to check the entire song without much experience. I wonder if this is an absolutely necessary step for every user to go, check, and annotate for themselves.  
Suggested fix: perhaps make this editing functionality a more specialized function (for more able users who know how to/more keen to detail) rather than for the average user.

### H8: Aesthetic and Minimalist Design

1. **H8: Aesthetic and Minimalist Design / Severity: 1 / Found by: A**   
   Screen 8

Problem: The expanded view of the post is very visually busy. It has text at the top, the album cover associated with the selected song, the drawing associated with the audio, the closed captions, the scroll bar, the caption, and the “like,” “comments,” and “explain” buttons. This is a very cluttered interface and is overwhelming for the user.

Fix: Simplify the expanded view interface.

1. **H8: Aesthetic & Minimalist Design / Severity: 2 / Found by: C**  
   Each post on the feed has 6 attributes (profile photo, username, name, small square image, larger core image, caption) which isn’t very minimalist and could overwhelm the user visually.  
   Fix: Consider removing some attributes on the feed and showing them instead when a user clicks into the post.

### H9: Help users recognize, diagnose, and recover from errors

### H10: Help and Documentation

1. **H10: Help and Documentation / Severity: 1 / Found by: A**  
   Screen 2  
   Problem: The onboarding screen says “ALTiO is for posting video and/or audio content that show up in a social feed.” The text implies that it’s only used for posting, not viewing, which is an inaccurate description of the platform. The use of “and/or” is also confusing — in what circumstances can you have both video and audio, and in what circumstances can you not?  
   Fix: Clarify that ALTiO is a social media platform for both posting a user’s own content and viewing other people’s content. Clarify what is meant by video and/or audio content.
2. **H10: Help and Documentation / Severity: 1 / Found by: A, B**  
   Screen 7  
   Problem: It is unclear what the text on top of each post means. From context clues about social networking apps, I can tell that the text at the upper left hand corner of the post is the poster’s username (John\_Doe), but it’s unclear what the text in the upper right hand corner (Lovers) is.   
   Fix: Explain what the text means, either in the onboarding process or on the feed.
3. **H10: Help and Documentation / Severity: 1 / Found by: A**  
   Screen 8  
   Problem: In the expanded view of the post, it is unclear what the text “[BECAUSE LOVE CAN BURN LIKE A CIGARETTE]” is. Is it a transcription of the song lyrics? Is it alt text?   
   Fix: Explain what the text means, either in the onboarding process or on the feed.
4. **H10: Help and Documentation / Severity: 3 / Found by: A**  
   Screen 36  
   Probem: It’s not clear to the user that they can scroll horizontally to view more audios with a tag genre.   
   Fix: Add an arrow icon to indicate the ability to scroll horizontally, or have the audios slowly scroll by themselves.
5. **H10: Help and Documentation / Severity: 1 / Found by: A**  
   Screen 36  
   Problem: It’s not clear that there is a dropdown that allows you to change the category you want to search for, since the dropdown is pre-filled and the triangle icon to indicate the dropdown is too small.   
   Fix: Start the dropdown with an empty state like “choose a category,” and make the dropdown triangle bigger to give the user a visual cue.
6. **H10: Help and Documentation / Severity: 1 / Found by: A, C**  
   Screen 25  
   Problem: using the swiping motion to close the “color” and “tool” selectors is not intuitive or clearly explained. Users might be confused about how to exit out of the selector because they don’t understand the swiping motion.   
   Fix: Add a better indicator or help tip for the swiping motion.
7. **H10: Help and Documentation / Severity: 2 / Found by: A, B, C**  
   Multiple screens  
   Problem: When a video is selected, it is unclear how the video is displayed on the feed accompanying the picture. It is also unclear how the create flow changes — does the user create a drawing for just the audio and not the video?   
   Fix: Explain how and when to use video in the onboarding process or within the app.
8. **H10: Help and Documentation / Severity: 1 / Found by: A, B**Multiple screens  
   Problem: It is unclear why a video upload is necessary or encouraged if the user is creating their own visual representations of audio.   
   Fix: Explain in the onboarding flow what the purpose of uploading video content is.
9. **H10: Help and documentation / Severity: 2 / Found by: E**

“ALTiO is for posting video and/or audio content that show up [sic] in a social feed.”

Rationale: I’ve read this, and I’m still confused — do you post directly to ALTiO? Does ALTiO import from or integrate with other social media platforms?

Fix: reword to be more actionable, focused on what a user does in the app (Are you just trying to say that ALTiO is a social media platform but specifically for audio/video?)

1. **H10: Help and Documentation / Severity: 2 / Found by: B**Skip button option when uploading a video   
   (create post flow) It was visually unclear to me why there was a ‘skip’ option for the audio when uploading a video due to the difference in button design with the ‘use original audio’ option (H4), but when I noticed, I was questioning why this was an option. Am I not always going to be making drawings that interpret music? With the other options, it seems unclear why I would be choosing to not use music to then interpret.   
   Suggested fix: add some clarifying text, or a helper pop-up (like you have already) to indicate to the user why this is an option. You could also add to your onboarding/instruction flow at the start, and explain the different formats that posts can be.
2. **H10: Help and Documentation / Severity: 2 / Found by: C**  
   A “help” option is globally missing. Some aspects of the app may not be as straightforward, like the drawing section of create, and a help option could aid users in accessing all the functionality effectively.  
   Fix: Add a help option or documentation page that users can access,

### H11: Accessible

1. **H11: Accessible / Severity: 2 / Found by: A**  
   “Draw” screens

Problem: Drawing on a small screen is difficult for those who have less mobility in their hands.

Fix: Create an iPad version of the app for a bigger drawing canvas or allow users to describe the audio in words rather than draw.

1. **H11: Accessible / Severity: 3 / Found by: E**

Description: The text (on the main page and some others) is teeny tiny.

Rationale: Maybe it’s because I’m looking at a phone on a laptop, but I’m holding my laptop up to my face and straining my eyes and it’s painful and difficult. And I have 20/20 (corrected) vision.

Fix: increase the font size. Probably there’s a standard for this but personally I like at least 14.

### H12: Fairness and Inclusion

1. **H12: Fairness and Inclusion / Severity: 2 / Found by: A**  
   “Draw” screens  
   Problem: Drawing on a small screen excludes those who have less mobility in their hands or have subpar artistic ability.

Fix: Create an iPad version of the app for a bigger drawing canvas or allow users to describe the audio in words rather than draw.

1. **H12: Fairness and Inclusion / Severity: 3 / Found by: E**

Description: on the #R&B screen, the art tab has one item = one ALTiO; however, the audio tab has one item = one song (which could have many ALTiOs?)

Rationale: I would expect these to match. It feels like people using the audio tab (mostly not Deaf/HoH people) are getting privileged — more choices.

Fix: have them be consistent, probably such that one item = one ALTiO, focusing on either audio or art

### H13: Value alignment

1. **H13: Value alignment / Severity: 4 / Found by: B, E, C**

“You’ll create visual interpretations of audio so that everyone can enjoy your content.”

Rationale: I know that the whole point is to be inclusive for Deaf/HoH folks — but if I didn’t already know that, I wouldn’t understand why you’re emphasizing “everyone” or why I’m drawing in the first place.  
Fix: specifically mention Deaf/HoH in this intro, as a rationale for using the app in the first place

1. **H11 Accessibility & H13 Value Alignment / Severity: 3 / Found by: B, C**  
   The slides indicate that a core value is that the app includes everyone in experiencing digital content, but much of the content is not accessible to those who have visual impairments.   
   Fix: Provide an option to click on captions (and the detail things) so they are read aloud, offer users an audio-only feed without some of the video content if they would like to focus on consuming audio. Consider a high-contrast color option, but a reliable change would be making an alt text box for the artist to give a full description of what is happening. The ‘explain’ buttons are also very small and hard to select, so perhaps making them a bit larger would be helpful/make them more visible.

## 3. Summary of Violations

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Category** | **# Viol.**  **(sev 0)** | **# Viol.**  **(sev 1)** | **# Viol.**  **(sev 2)** | **# Viol.**  **(sev 3)** | **# Viol.**  **(sev 4)** | **# Viol. (total)** |
| H1: Visibility of Status | 0 | 2 | 0 | 3 | 0 | **5** |
| H2: Match Sys & World | 0 | 3 | 0 | 0 | 0 | **3** |
| H3: User Control | 0 | 0 | 1 | 2 | 1 | **4** |
| H4: Consistency & Standards | 0 | 9 | 8 | 1 | 1 | **19** |
| H5: Error Prevention | 0 | 2 | 1 | 0 | 1 | **4** |
| H6: Recognition not Recall | 0 | 2 | 0 | 1 | 0 | **3** |
| H7: Efficiency of Use | 0 | 3 | 1 | 0 | 0 | **4** |
| H8: Minimalist Design | 0 | 1 | 1 | 0 | 0 | **2** |
| H9: Help Users with Errors | 0 | 0 | 0 | 0 | 0 | **0** |
| H10: Help & Documentation | 0 | 6 | 4 | 1 | 0 | **11** |
| H11: Accessible | 0 | 0 | 1 | 1 | 0 | **2** |
| H12: Fairness & Inclusion | 0 | 0 | 1 | 1 | 0 | **2** |
| H13: Value Alignment | 0 | 0 | 0 | 1 | 1 | **2** |
| **Total Violations by Severity** | **0** | **28** | **18** | **11** | **4** | **61** |

***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)**

***Evaluator X findings of sev Y / total number of severity Y***

## 4. Evaluation Statistics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Severity /**  **Evaluator** | **Evaluator A** | **Evaluator B** | **Evaluator C** | **Evaluator E** |
| Sev. 0 | 0 | 0 | 0 | 0 |
| Sev. 1 | 17 / 28 = 61% | 8 / 28 = 28% | 4 / 28 = 14% | 7 / 28 = 25% |
| Sev. 2 | 5 / 18 = 28% | 7 / 18 = 39% | 5 / 18 = 28% | 6 / 18 = 33% |
| Sev. 3 | 4 / 11 = 36% | 4 / 11 = 36% | 3 / 11 = 27% | 3 / 11 = 27% |
| Sev. 4 | 3 / 4 = 75% | 2 / 4 = 50% | 2 / 4 = 50% | 1 / 4 = 25% |
| **Total (sevs. 3 & 4)** | 7 / 18 = 39% | 6 /15 = 40% | 5 / 15 = 33% | 4 / 15 = 27% |
| **Total  (all severity levels)** | 29 / 61 = 48% | 21 / 61 = 34% | 17 / 61 = 28% | 17 / 61 = 28% |

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

## 5. Summary Recommendations

We really liked the addition of an onboarding flow to help inform users of the conceptual purpose of the app and illustrate a few key actions (e.g. using a drawing tool to represent audio). The pop-up tips throughout the app were also extremely informative for more specific, nitty gritty instructions. We enjoyed the clean, minimalist design and consistent visual aesthetic throughout the app —we thought the design was very clean and sharp, [super hip](https://youtu.be/5TLuQaKwK0o)! The interface and concept reminds us of a more accessible version of Instagram, and we thought it was smart to structure the app using a format that is familiar to users.

While the onboarding was helpful, we still thought it didn’t have quite as much detail as we would have liked. Some of the interface was confusing, which explains why so many of the heuristic violations we found were regarding the lack of Help and Documentation. It would be useful to explain to the user the types of posts they can format/encounter so that they can recognize it when they see it (recognition over recall!) in the app. This is certainly a unique app, so all explanations are useful! The onboarding component will play a huge role down the line in your high-fi prototype.

We noticed that the ALTiO’s prototype’s most commonly violated heuristics were Help and Documentation, Consistency and Standards, and User Control and Freedom. The biggest challenge we faced when navigating the prototype was the lack of Help and Documentation. While the onboarding screens and pop-up tips were helpful, there are some aspects of the design that still created some confusion, mostly due to inconsistent iconography (like different back button designs) and lack of explanation of unfamiliar features.

Consistency and Standards is also a point of improvement — ensuring the user is not confused by inconsistent iconography, language, or terminology is going to be key for the high-fidelity prototype.

We found many restrictions/confusion on User Control and Freedom through the inconsistent use of “back” options and lack of ease when trying to go back and forth between different stages of flows. This could be improved in the next prototyping phase, especially regarding the ability to complete expected behavior and navigate throughout the app with ease. For example, we were left confused by why some buttons would take us to a page we weren’t expecting, (e.g. when making a post, explore and using the search bar lead to the same page.)

The app could also benefit from increased options for personalization and customization, especially with a focus on designing for power users who might use ALTiO daily and would appreciate shortcuts and streamlined interactions for commonly used actions. We found some flows, specifically the task of posting an ALTiO, to be quite arduous (compared to, say, posting on Instagram, it takes a lot longer and has a lot more steps.) To improve Flexibility and Efficiency of use, we recommend streamlining the steps in each task.

We were confused about some features that seemed to not be included on posts but were referenced on other screens. Perhaps some of that would be more evident with real data, so not sure the severity of that particular issue. This app is very reliant on visuals; we’ve already mentioned concerns for low-vision users, but in general it is important to consider how options for text can greatly help.

***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: ​​Fairness and Inclusion**

* Users shouldn’t feel that the design is not made for them.
* The design should meet all users’ needs equally and prevent the reproduction of pre-existing inequities.
* It should not create additional burdens for members of disadvantaged populations.

**H13: Value Alignment**

* The design should encode values that users can understand and relate to.
* Conflicting collateral values should not emerge when the user interacts with the product.
* Encoded values should match users’ values in a broad set of use-contexts.