



ART!

Reimagining audio for everyone



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PROBLEM

Deaf and hard of hearing people are often left out of key nuanced information that is conveyed through audio in digital spaces

SOLUTION

ALTiO is a social media platform that encourages and provides visual interpretations of audio—providing *alternative* options for everyone to experience content

Outline

Interface Changes

Testing Methodology

Results

Discussion



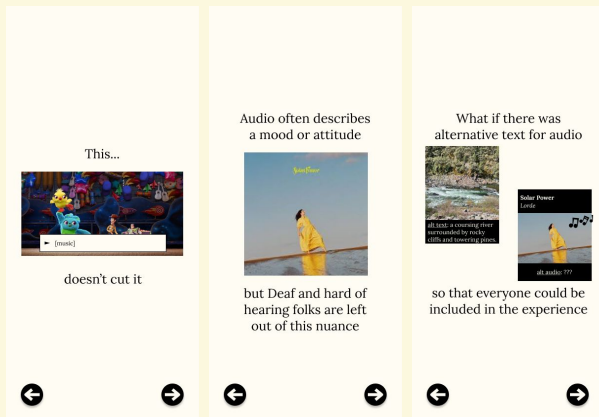


Prototype Changes

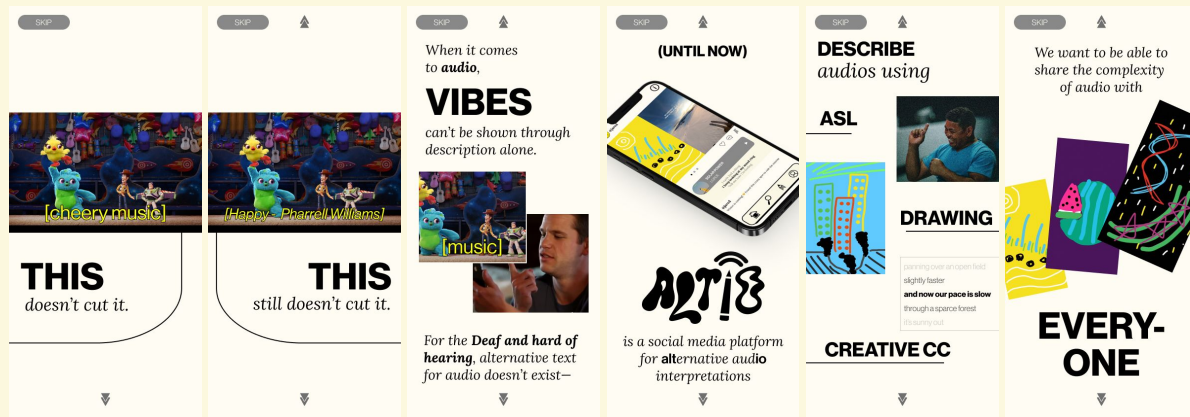
Interface Changes

MAJOR CHANGE 1 - Onboarding

Old design:



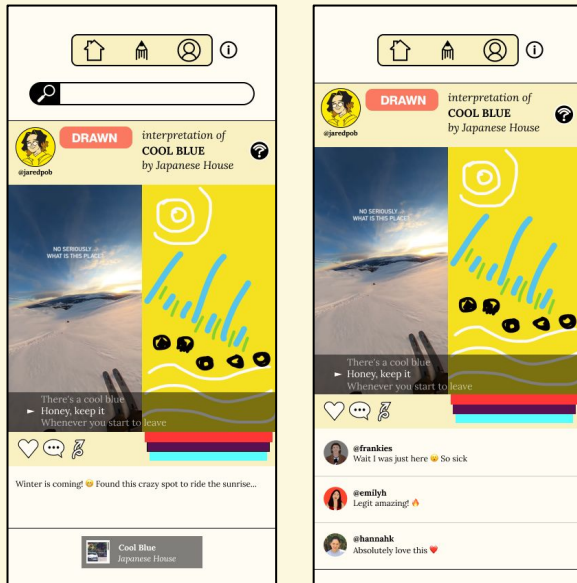
New design:



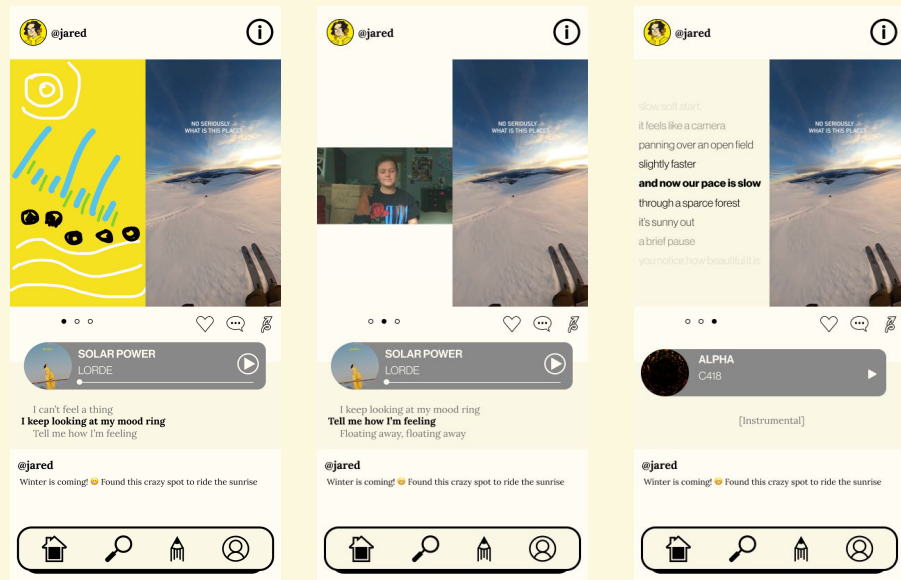
Interface Changes

MAJOR CHANGE 2 - Home Screen

Old design:



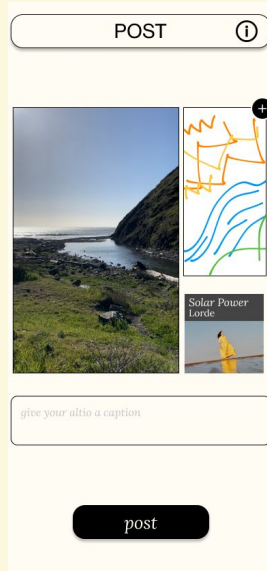
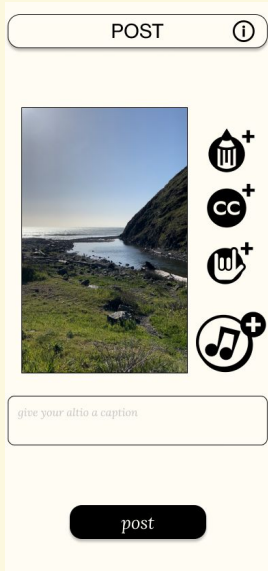
New design:



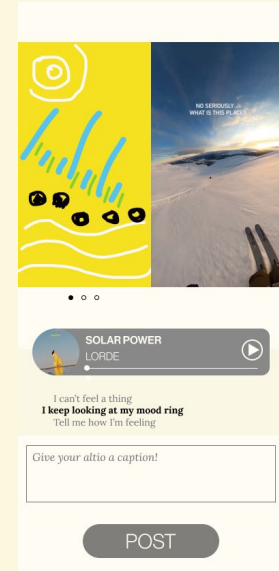
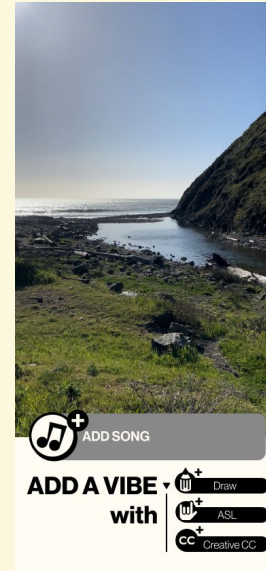
Interface Changes

MAJOR CHANGE 3 - “Create” Flow

Old design:



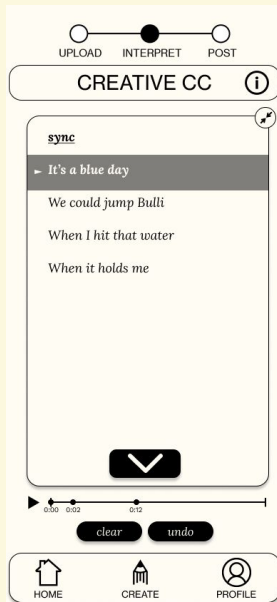
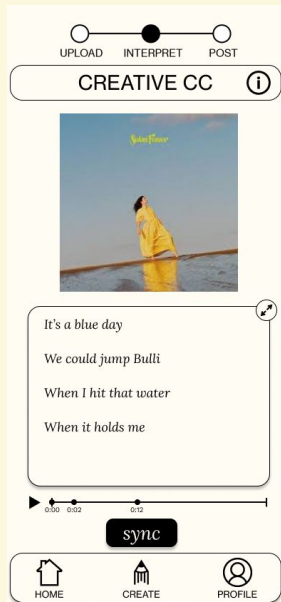
New design:



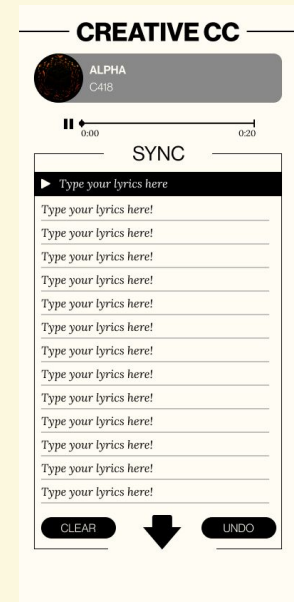
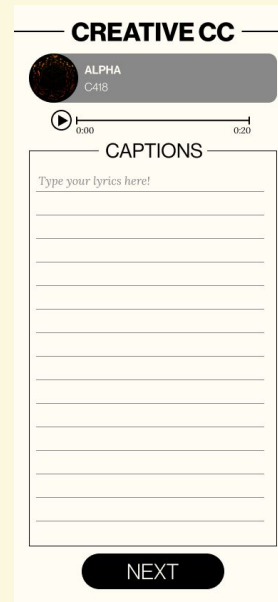
Interface Changes

MAJOR CHANGE 4 - Creative CC Flow

Old design:



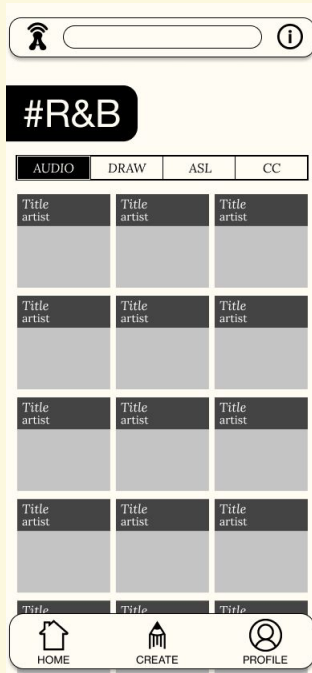
New design:



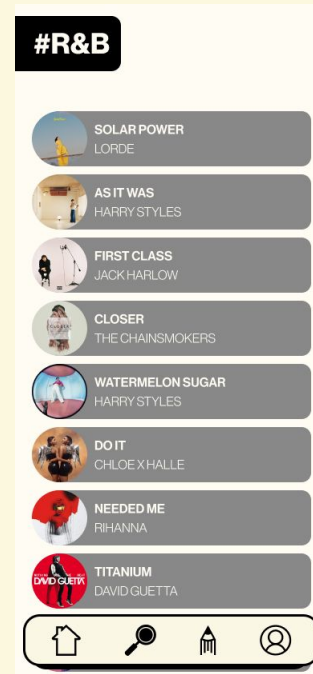
Interface Changes

MAJOR CHANGE 5 - Search View

Old design:



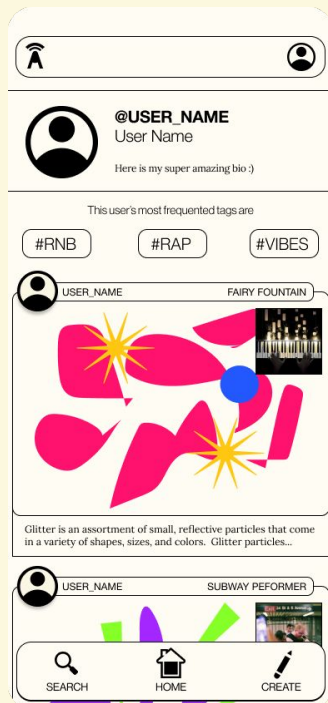
New design:



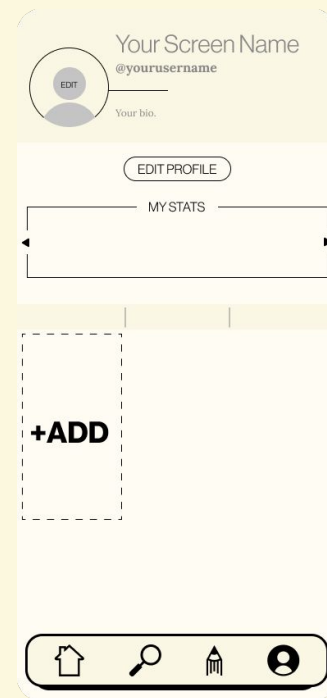
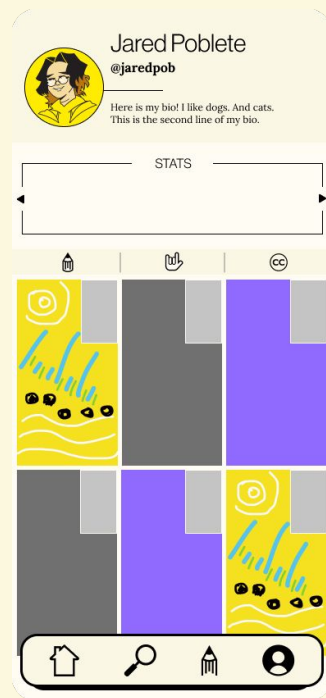
Interface Changes

MAJOR CHANGE 6 - Profile View

Old design:



New design:



Interface Changes

MAJOR CHANGE 7 - Create Account

Old design:

The old design wireframe consists of three vertical panels. The first panel shows the ART18 logo at the top, followed by a 'login' button and three input fields for 'username', 'password', and 'password'. Below these is the text 'dont have an account?' and a 'create one' button. The second panel is titled 'create account' and contains four input fields: 'full name:', 'email:', 'date of birth:', and 'username:', followed by a 'password:' input field. Below this is the text 'already have an account?' and a 'login' button. The third panel is titled 'preferences' and includes three rows of toggle switches: 'audio:' with 'on' and 'off' buttons, 'notifications' with 'on' and 'off' buttons, and 'preferred alternative content:' with 'audio', 'asl', and 'creative co' buttons. At the bottom is a 'let's get started' button.

New design:

The new design wireframe consists of four vertical panels. The first panel shows the ART18 logo at the top, followed by the word 'LOGIN' and three input fields for 'Email', 'Password', and 'Password'. Below these is the text 'Don't have an account?' and 'Sign up.', followed by a 'SIGN IN' button. The second panel is titled 'PREFERENCES' and includes three rows of toggle switches: 'Audio' with 'ON' and 'OFF' buttons, 'Notifications' with 'ON' and 'OFF' buttons, and 'Preferred Alternative Content' with 'Drawing', 'ASL', and 'Creative CC' buttons. At the bottom is a 'START' button. The third panel is titled 'SIGN UP' and contains four input fields: 'Full Name', 'Email', 'Birth Date', and 'Username', followed by a 'Password' input field. Below this is the text 'Already have an account?' and 'Login.', followed by a 'NEXT' button. The fourth panel is titled 'PREFERENCES' and includes three rows of toggle switches: 'Audio' with 'ON' and 'OFF' buttons, 'Notifications' with 'ON' and 'OFF' buttons, and 'Preferred Alternative Content' with 'Drawing', 'ASL', and 'Creative CC' buttons. At the bottom is a 'START' button.



Testing Methodology

Participants



PARTICIPANT 006

Current Stanford Junior

Hearing

Product Design



PARTICIPANT 007

Working woman in her 50s

Deaf



PARTICIPANT 008

Current Stanford Junior

Hearing

Science and Technology in
Society

Participants Cont.



PARTICIPANT 009

Recent College Graduate

Hearing

Medical Lab Sciences



PARTICIPANT 010

Current Stanford Freshman

Hearing

Symbolic Systems

Apparatus

**INTERVIEWS
CONDUCTED**



**APP
ACCESS**



**SCREEN
RECORDINGS**



Procedure

1. We instructed participants to download Expo Go on their device, then log in with provided credentials to access our app by scanning a QR code.
2. We briefly introduced our app and purpose, as well as how the testing procedure would look. At this point we began recording if possible.
3. We asked users to complete the first task that we introduced. After completion, we asked a few questions about their personal experience throughout the process.
4. We repeated this with each task, and finally concluded the interview.

Test Measures

1. ONBOARDING QUIZ SCORE

- *Does the user understand the basic goals and functions of the app from the onboarding screens?*

2. NOTABLE CHALLENGES

- *Can the user achieve the app's goals with minimal frustration?*

3. NOVELTY & FUN

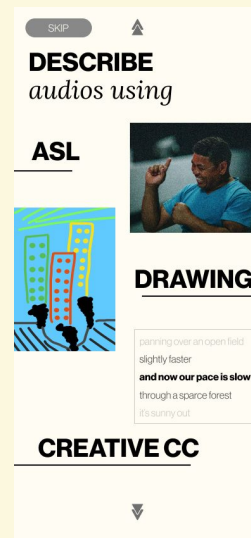
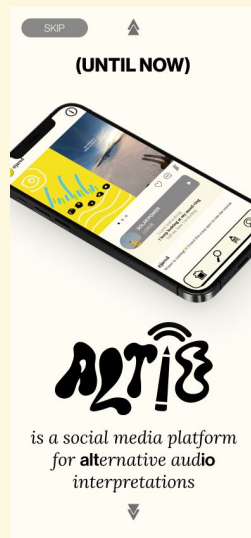
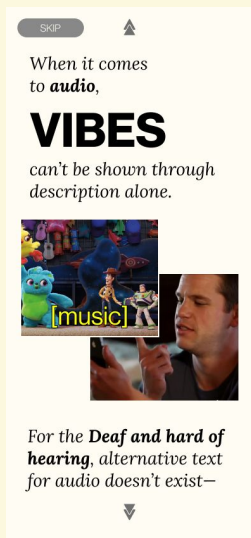
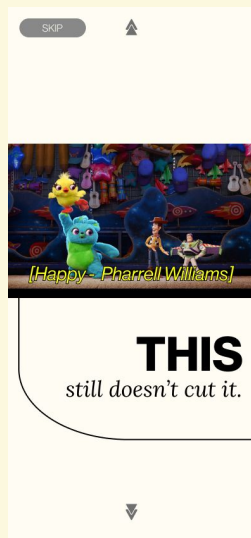
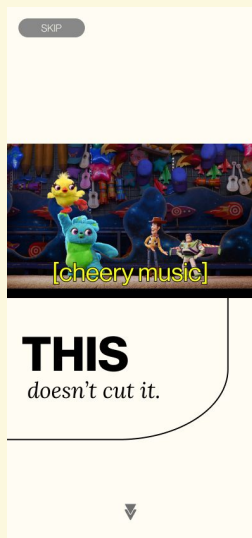
- *Do they enjoy using the app?*

Tasks

TASK 1 - Onboarding

We had the user click through and read through the onboarding flow.

GOAL: For users to be able to understand the purpose of the app and what an “ALTiO” is.

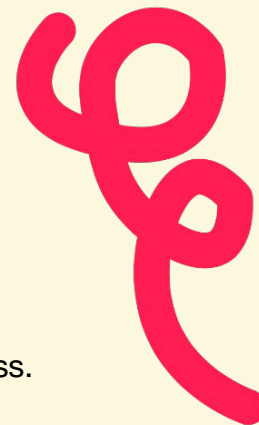
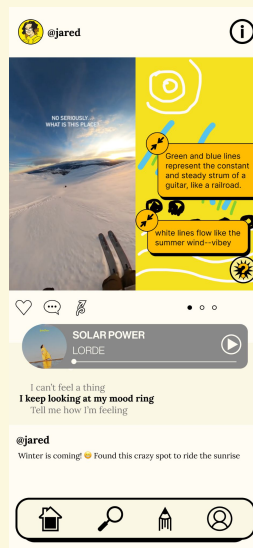
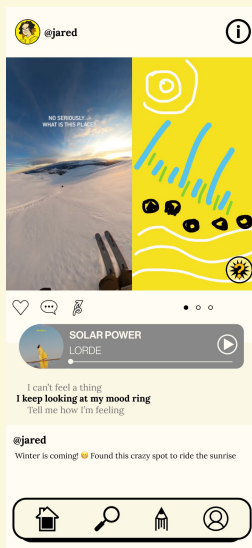


Tasks

TASK 2 - View Content

We had the user navigate to an “ALTiO” interpretation for a post and view its annotations.

GOAL: A user can successfully navigate to an interpretation relatively easily, and that it is an enjoyable process.

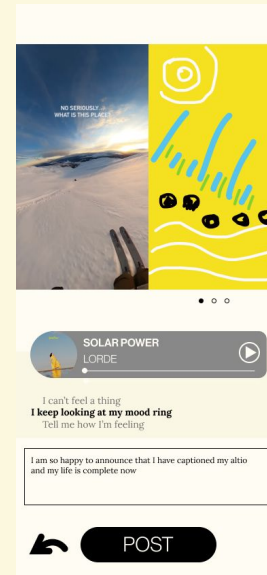
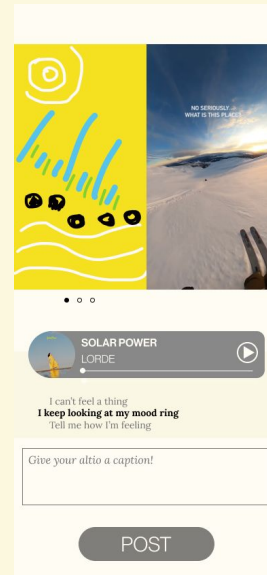
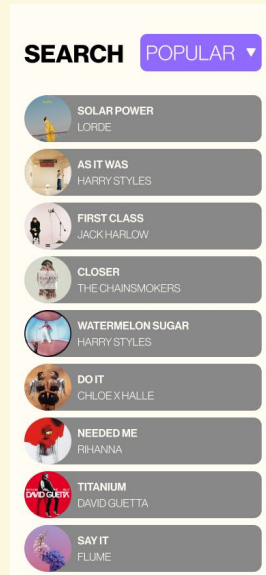
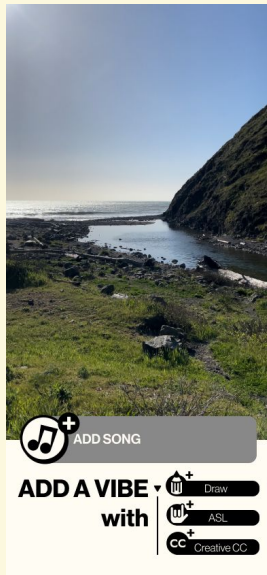


Tasks

TASK 3 - Post ALTiO

We had the user create a post with an ALTiO interpretation.

GOAL: A user can successfully create a post with ease and enjoyment.

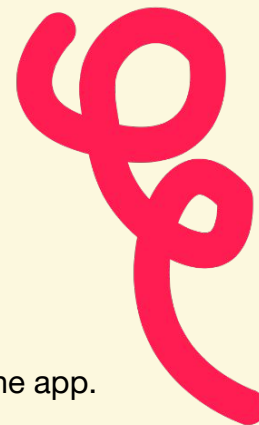
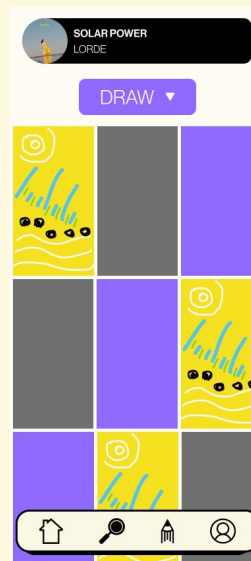
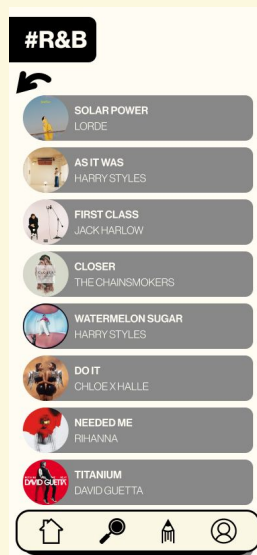


Tasks

TASK 4 - Engage with Community

We had the user navigate to find more interpretations of Funky audio.

GOAL: A user can find other interpretations of audio with ease, and the user is curious about other areas of the app.



Results



Onboarding Quiz Score

1. *Based on what you saw in the onboarding, what can you do in this app?*
2. *What is the purpose of this app?*
3. *What is an altio?*

PARTICIPANT 006 2/3

PARTICIPANT 007 2/3

PARTICIPANT 008 3/3

PARTICIPANT 009 3/3

PARTICIPANT 010 2/3

Every incorrectly answered question was for number 3. In our new onboarding, we don't have an explicit screen that defines altio, but we do it more subtly seen here:



Notable Challenges

Noting incidents where users explicitly stated confusion, dissatisfaction, or questions regarding the apps high level functionality (not a simple coding bug)

PARTICIPANT 006 8

PARTICIPANT 007 8

Examples:

- *“Creative CC is not user friendly to change what I want.”*
- *“If I’m using it in class and the song reloads for each I would be concerned”*
- *“I really don’t understand the app, I don’t know what it’s doing. I don’t understand the two pictures next to each other, no signing or anything”*
- *“I clicked on explanations and saw them, but don’t understand what they have to do with hamster or rabbit (don’t see how they are related)”*

PARTICIPANT 008 4

PARTICIPANT 009 5

PARTICIPANT 010 4

Instances of Visible Enjoyment



PARTICIPANT 006

- “I like [the topics for you] aesthetic”
- “It’s like a super artsy tiktok”

PARTICIPANT 007

- “[The process is] challenging, but [the interpretation] is cool and allows me to explain what i just posted. I do like that, it’s nice”
- “You could do this with teaching sign”
- Overall really excited about the capabilities of this app

PARTICIPANT 008

- Notes that she gets scared when she draws, so the info. pop-up was helpful for confidence

Instances of Visible Enjoyment Cont.



PARTICIPANT 009

- “I like the color because it’s not out and popping out at you, not white. Font is really nice too”
- “This is actually a very important thing, especially since I know ASL and it’s hard communicating This is so cool, I like it.”
- “Cool because it’s not something you usually experience in a song, but this gives you an idea of it”

PARTICIPANT 010

- “Oh, no uploads for Solar Power. I’ll add an upload for it.”

Critical Incidents

Scale from 0-4, 0 being least severe

PARTICIPANT 006

Believed play button on audio card is for pausing and beginning song	3
Couldn't determine if hashtags were clickable or not	2
Profile unavailable	3
Was confused about posting videos due to lack of context from onboarding	4
Couldn't toggle between interpretations on home screen	4
Still was unsure on what creative CC was	4

PARTICIPANT 007

Misinterpreted features of app after onboarding	4
Incorrect "altio" definition	2
"I don't know who is talking and what it's related to"	4
Initially didn't understand the interpretations next to content on home feed	4
Assumed lyrics were attached to a song but didn't understand their connection to interpretation	3

PARTICIPANT 008

Was distracted during drawing by bugged audio	4
Pressed 'x' instead of return during annotating	3
Couldn't view post behind keyboard	3
Couldn't access info button during task 2	3
Annotations on home feed not implemented	4
Didn't know where the top of the home feed posts was	2

Critical Incidents

Scale from 0-4, 0 being least severe

PARTICIPANT 009

Tapped annotation on side and it ran off	2
Audio bugged and not playing on home feed	4
Thought "Done" meant post was over	1
Wasn't able to exit to Home without posting	4
Video and Drawing in Search were not clickable	4
Type ran below keyboard	3

PARTICIPANT 010

Did not double tap the right button for annotations	3
Didn't have volume on during ASL interpreting	4
Tried to drag annotations to move	2
Made it to onboarding without choosing a interpretation preference	3
"Coming from instagram [there's] a lot of extra steps, but then again if I'm using this app I would be using it to make accessible content"	4

TOTAL

Severity	Number of Incidents
0	
1	1
2	5
3	7
4	13

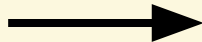


Discussion

What we learned



Despite being more concise, onboarding didn't prepare users for the app's content



NEED MORE CLARIFICATION FROM THE BEGINNING

Potential solutions:

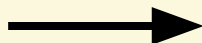
- Have preview screens of what creating a post will look like so people learn
- Clarify interpreting videos vs. audio; It's important that users know what kinds of content they can post on this app



What we learned



The home screen was overwhelming to most users in terms of clickable objects



MAKE ONBOARDING MORE DIRECTED

Potential solution:

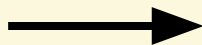
- Create interactive tasks for tutorial content



What we learned



Most users didn't understand the concept of "preferred alternative content" in sign-up



EXPLAIN INTERPRETING BY REORDERING SETTINGS

Have the onboarding sequence explain the types of interpretation *before* choosing preferences

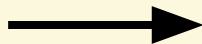
- Short description of each kind of interpretation method



What we learned



Users were put off by the pop-ups that explain app features



POP-UPS

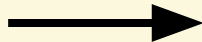
- Only show pop-ups to first-time users
- Make info buttons more concise (UX writing!) and standardized throughout the app



What we learned



Users wanted to edit their interpretation uploads



GIVE USERS OPTIONS FOR CHANGING THEIR POSTS

- Once you have uploaded Draw, ASL, or Creative CC you should be able to change it
- Cancel a post
- Add back or redo buttons



Looking forward



THE ALTIO LEARNING CURVE

Learning our way toward the most concise *and* didactic onboarding sequence. We want people to know as much as possible before they even reach the home screen, but how can we do that naturally?

HOW DO WE LOWER THE BAR FOR WHAT IT MEANS TO BE CREATIVE?

008: ““I get self-conscious about my drawing...”

009: “I’m not really a good artist so I’ll see what I can do...”

Is this something we want to cater to, or lean into a demographic?

EXPLORE EXPANDING DRAW FEATURES

Fill, stickers, color wheel, scrolling indication

- Drawing upload?



Directives



INTERACTIVE ONBOARDING


- MAKING HOME FEED AS APPROACHABLE AS POSSIBLE
- INCLUDE “VIDEO UPLOADS” IN ONBOARDING

ADDING FLEXIBILITY IN CREATE FLOW (CANCEL, EDIT, BACK)

IMPROVING KEYBOARD FUNCTIONALITY

INTEGRATE SPOTIFY

MATCHING HIGH-FI AND FIGMA SCREENS

- UPDATED ASSETS (EXPLAIN BUBBLES, TEXT STYLES, PLAY BUTTONS)
 - CLEAN STYLING
- 

Thank you!

