



# Meet the team

we →



DEV

**EMILY HUANG**

COMPUTER SCIENCE, '22



DEV

**HANNAH KIM**

COMPUTER SCIENCE, '24



UI/UX

**JARED POBLETE**

SYMBOLIC SYSTEMS, '23



UI/UX

**FRANKIE SPERKA**

PRODUCT DESIGN, '24



Muskego High School  
Winter Choir Concert  
MHS Performing Arts Center  
December 15, 2011



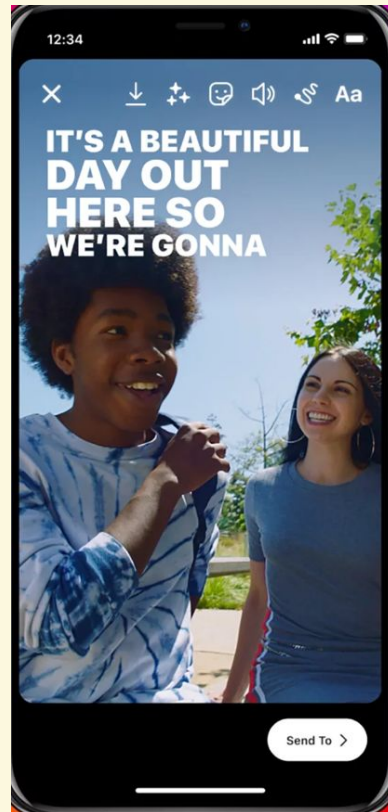
**Why isn't this the norm?**



**Why isn't this the norm?**

We want to bridge that gap

# What's out there





**(There isn't much else.)**

# Outline

Who are we?

Where have we been?

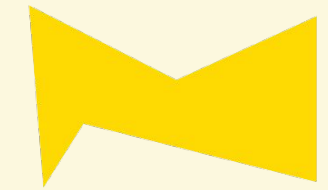
Where are we now?

What comes next?



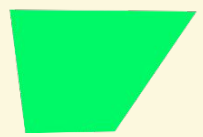
**(WHO ARE WE?)**

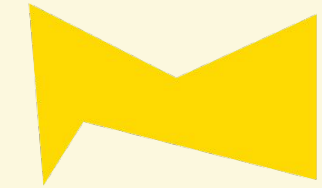




## **PROBLEM**

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





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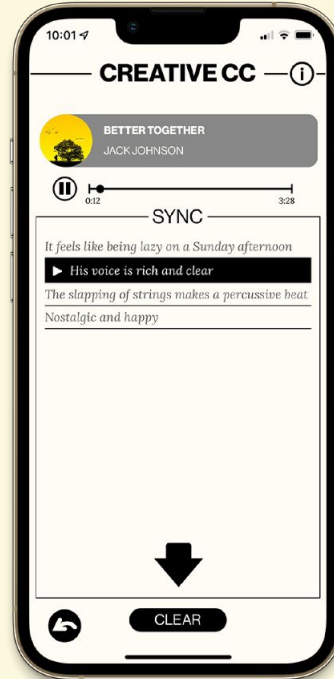
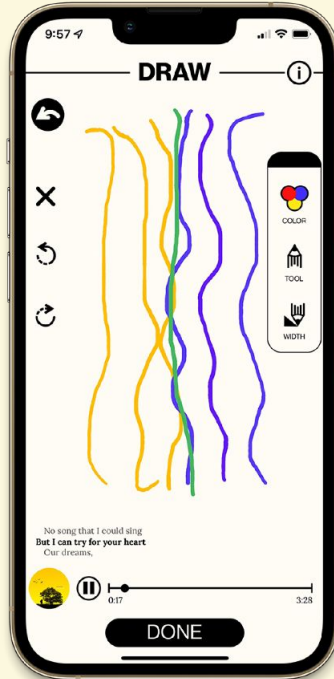
## SOLUTION

**ALTiO** is a social media platform that encourages and provides drawings as visual supplements for interpreting audio—providing *alternative options* for everyone to experience content

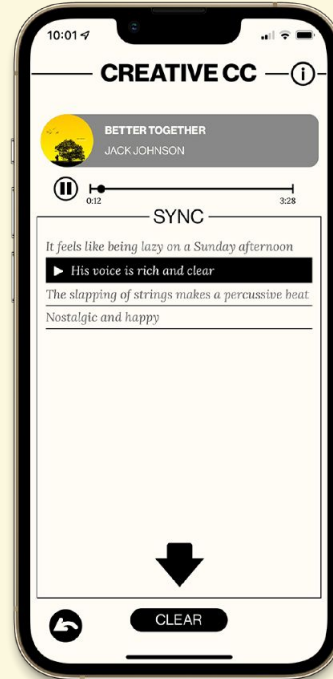
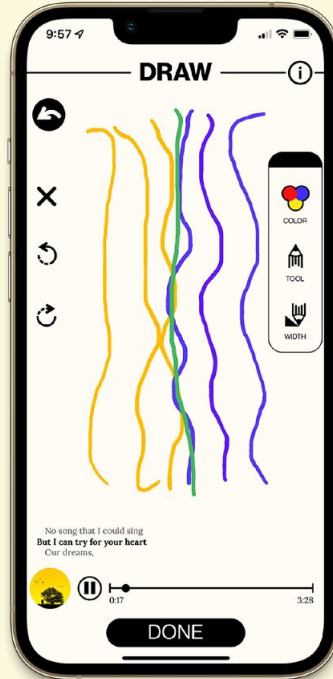
# Reimagining audio for everyone



# AL!O



# A social media app dedicated to creating and viewing alternative audio interpretations





**(WHERE HAVE  
WE BEEN?)**





# Needfinding



The participant enjoys attending her children's choir concerts

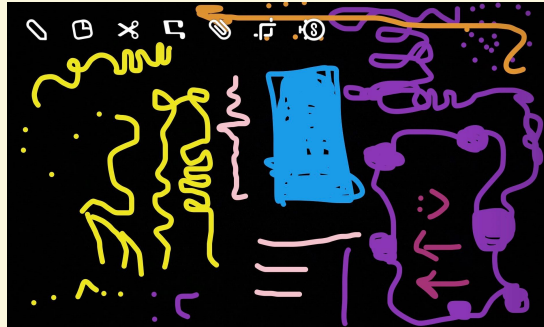
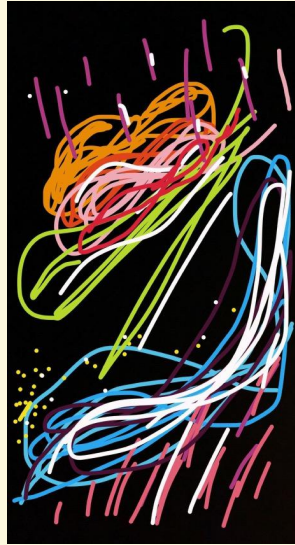
HOW MIGHT WE?

...convey nuanced descriptions in a non-auditory way to include the Deaf / HoH community in pop culture?

"Hearing is something that is difficult for me, visual is something that is easy."

# Early Testing

*A unique audio interpretation can be effective for conveying the nuance of information and meaning in content*



Experience prototype results of drawing  
“Idontwannabeyouanymore” by Billie Eilish

*“She got more out of it than I even realized was there” - Participant 015*

## VALID

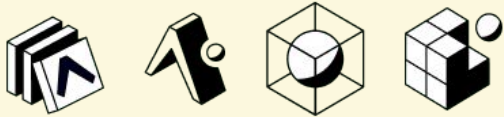
# Low-Fi Prototype



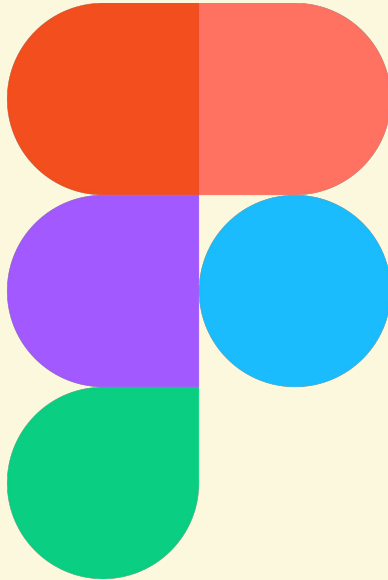
# Implementation

EXPO, REACT-NATIVE

 **Expo**



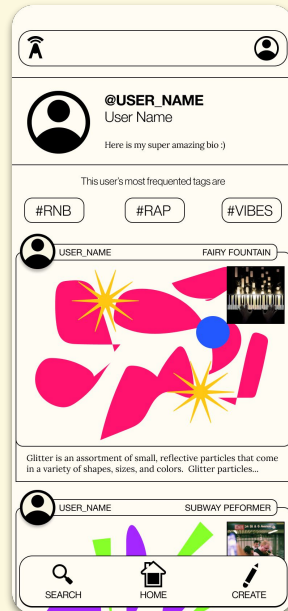
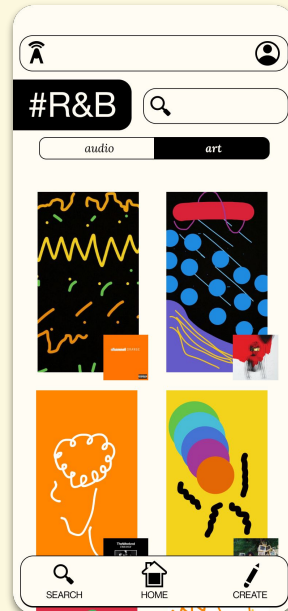
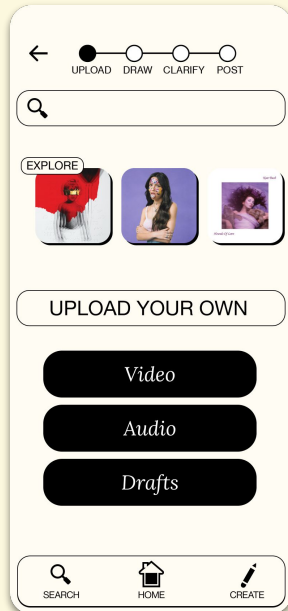
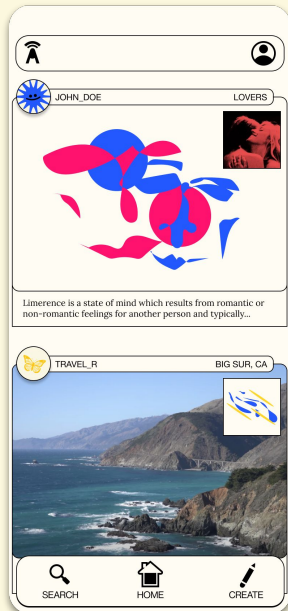
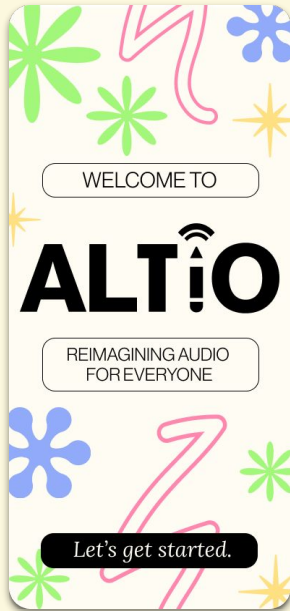
FIGMA



FIREBASE



# Hi-Fi Prototype V1



# Usability Study

## **ONBOARDING NEEDS IMPROVEMENT**

“It doesn’t tell me what my audience can expect to see”

Confused on first read, but after rereading participant understood

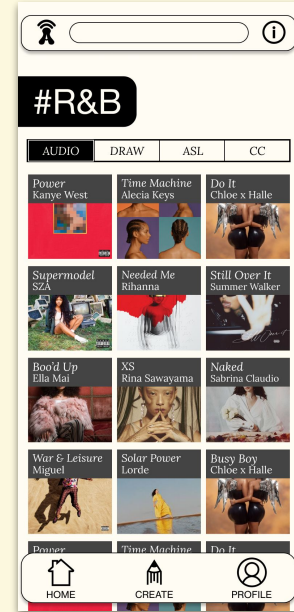
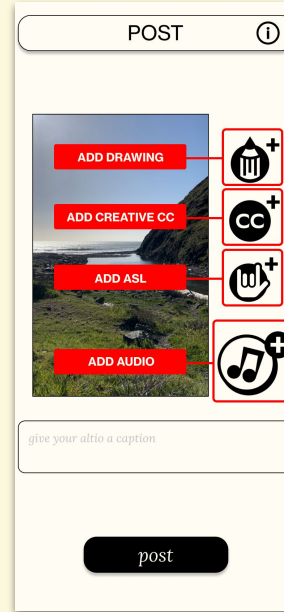
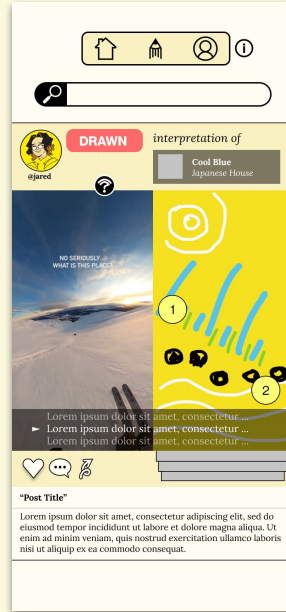
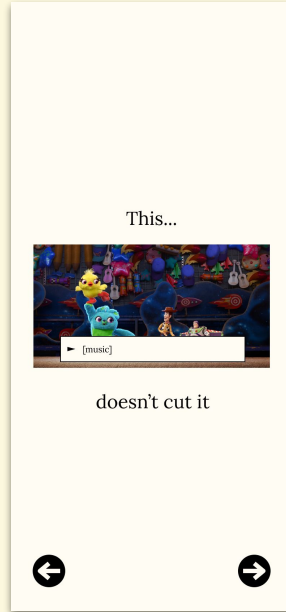
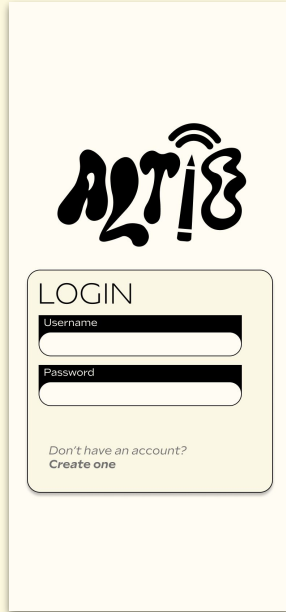
## **ACCOUNT CREATION / USER PREFERENCES**

Avoid feelings of exclusion for Deaf and HoH users by asking for preferences of content type and audio preferences early on

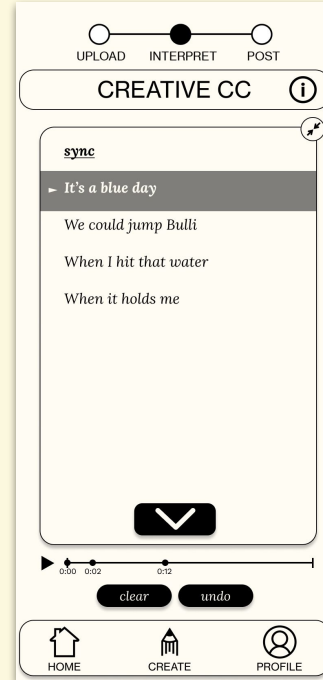
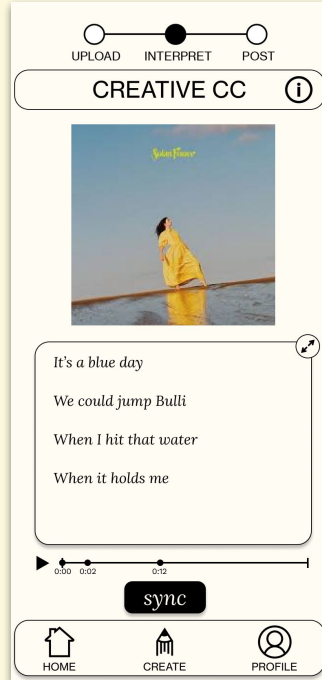
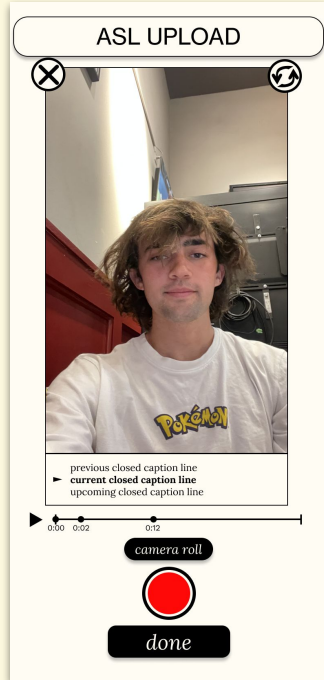
## **INTRODUCED ASL / CREATIVE CC SUPPORT**

## **FLEXIBILITY IN POST PROCESS**

# Hi-Fi Prototype V2



# Hi-Fi Prototype V2





# Field Testing

## **THE ALTIO LEARNING CURVE**

Learning our way toward the most concise *and* didactic onboarding sequence.

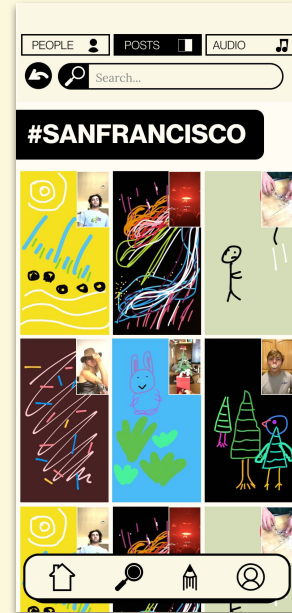
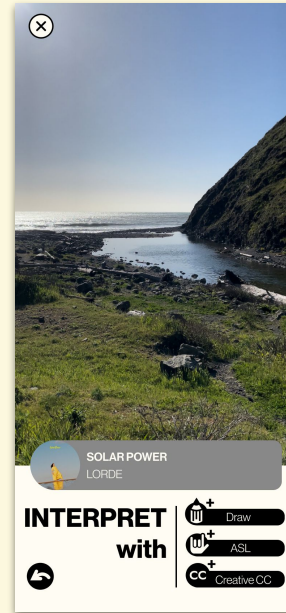
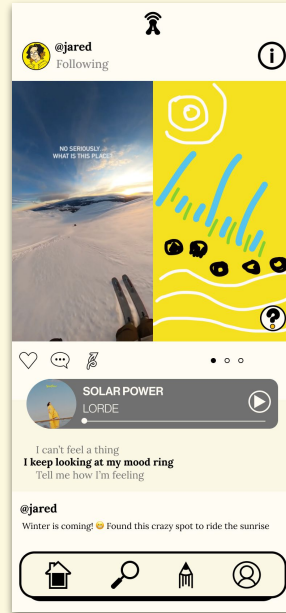
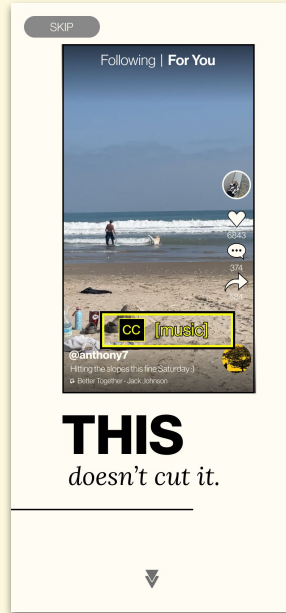
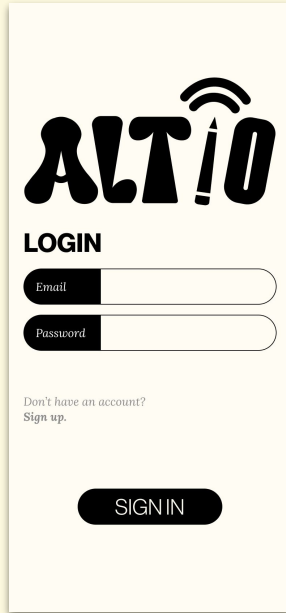
## **ADDING FLEXIBILITY IN CREATE FLOW (CANCEL, EDIT, BACK)**

## **IMPROVED SEARCH USABILITY AND BACKEND IMPLEMENTATION**

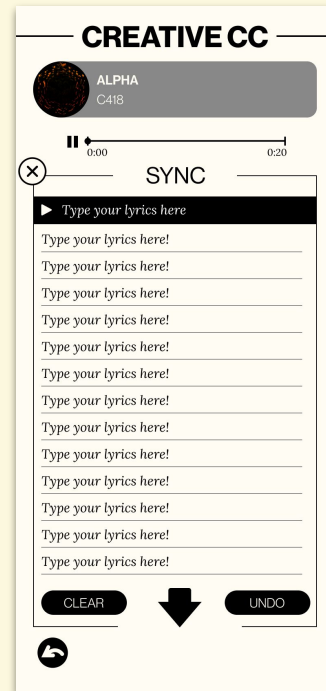
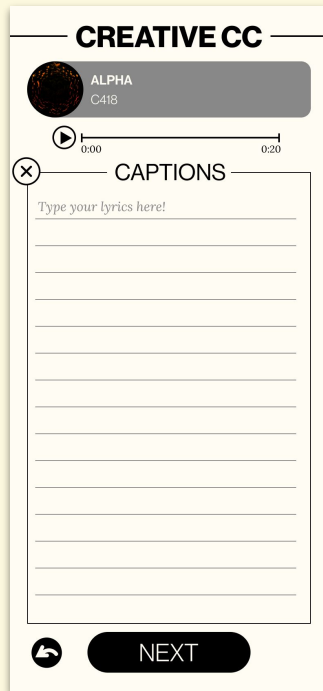
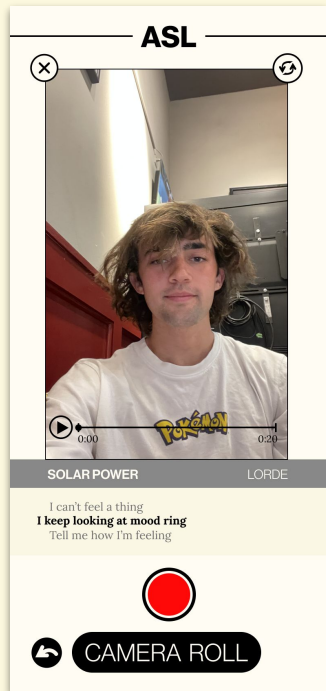
## **IMPROVED ASL / CREATIVE CC SUPPORT**

## **CLARITY IN POST PROCESS**

# Hi-Fi Prototype V3



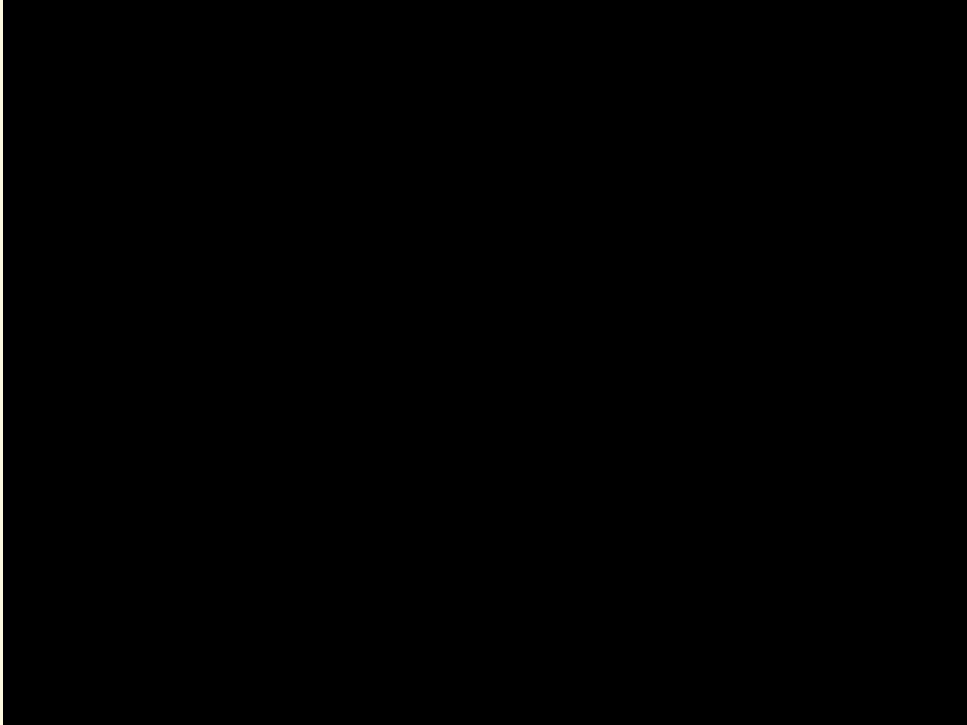
# Hi-Fi Prototype V3



**(WHERE ARE  
WE NOW?)**



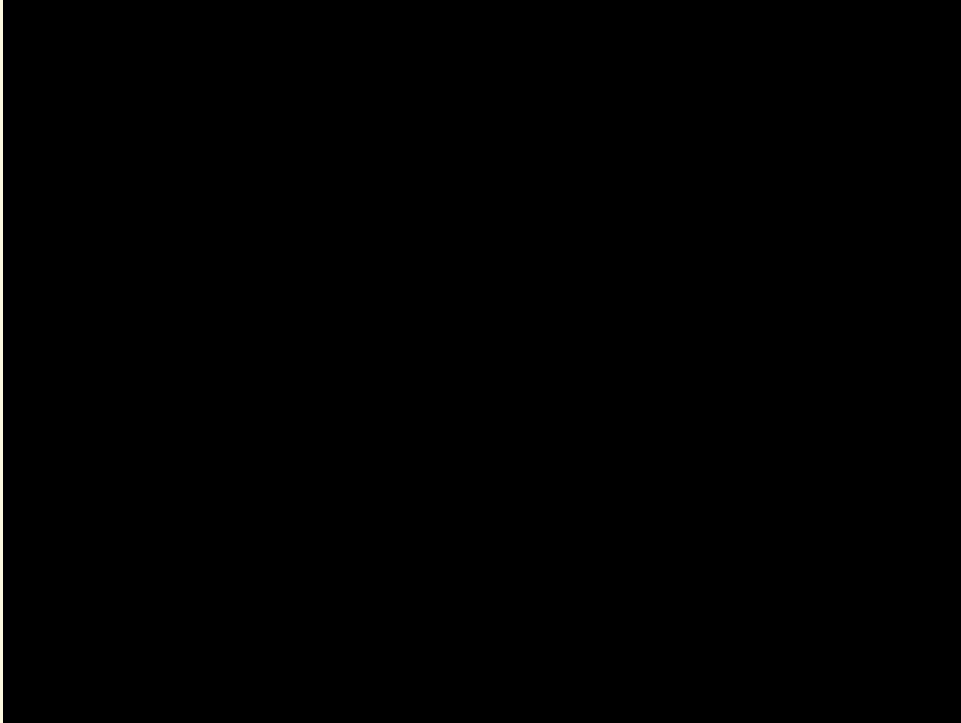
# Task 1 - GETTING STARTED



**CREATE** your individual profile

**EXPLORE** and learn about the app

# Task 2 - SEE ALTIO



**SCROLL** through a robust home feed populated by users you're following and suggested content

**VIEW** alternative interpretations from users including drawings, creative closed captioning, and ASL

**UNDERSTAND** users by revealing their creative clarifications

# Task 3 - CREATE ALTIO



**CREATE** alternative interpretations based on your listening experience

**DRAW** what you hear

**TRANSLATE** audio into ASL

**WRITE** creative closed captioning like poetry

**CLARIFY** your post with annotations for other people to see

# Task 4 - EXPLORE ALTIO



**VIEW** other users posts and scroll through interpretations

**SEARCH** for users, tags, music, and posts

**TOGGLE** between alternative interpretations

**INTERACT** with other users' profiles



**(WHAT COMES NEXT?)**



# Unimplemented

## **ALTERNATE ONBOARDING SEQUENCE**

Considering asking about how users identify to create a more curated experience for a deaf or HoH user

*This was a late add and new realization*

Participant 007: “Confusing, there was a lot of verbiage, initially didn’t know it was for accessibility for me”

## **SPOTIFY x MUSIXMATCH**

Having users own music in our app

*We are in contact with musixmatch to get captions for music but they have been unresponsive and we do not want to include audio that does not have captions*

# ALTiO

Reimagining audio for everyone

