

# Sketching, Lo-Fi Prototyping, & Usability Testing

Team TuneTribe

Our team  
Team TuneTribe



**MAX**



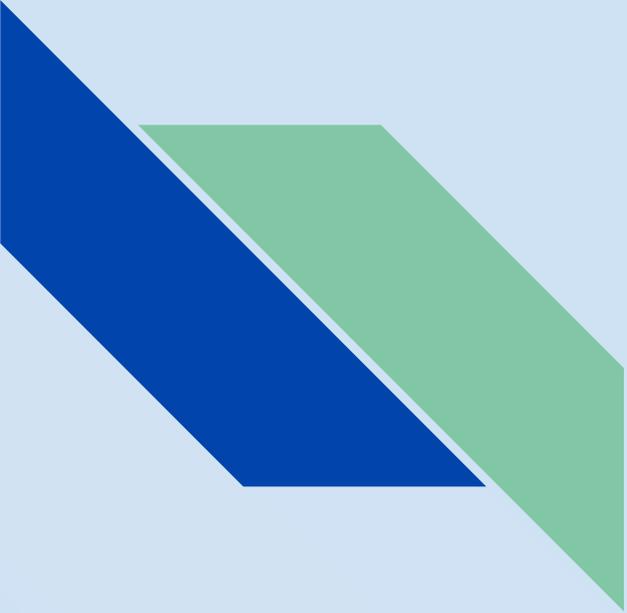
**STEVEN**



**LIZI**



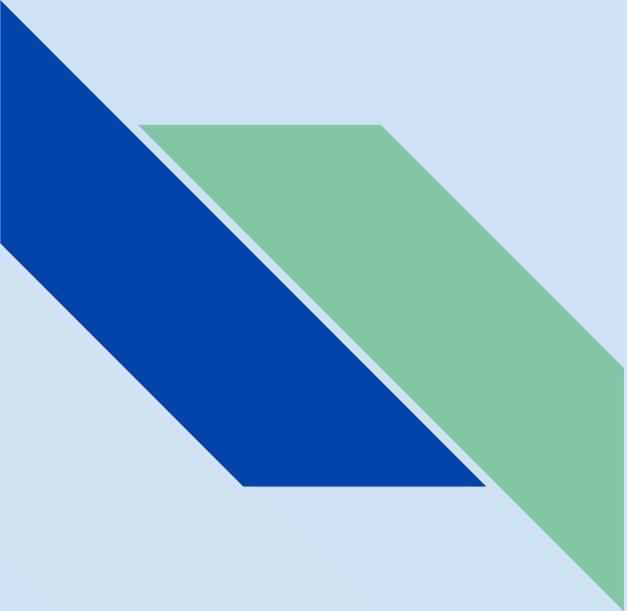
**GRACIELLY**



# Tune Tribe

“Find the beat of your community”

**Attend live events  
in your community,  
find new people  
and music**



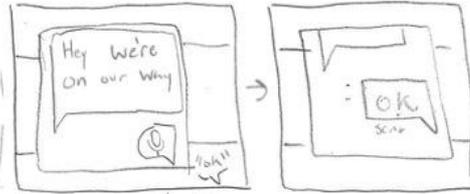
## Presentation at a Glance

- **Exploring our prototype using concept sketches**
- Selecting our prototype interface
- Lo-Fi Prototype construction
- Lo-Fi Prototype Task Flow
- Testing methodology
- Testing results
- Discussion
- Appendix

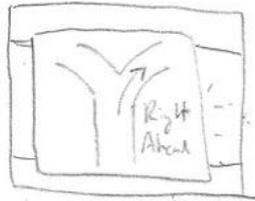
# Sketching Explorations



Home Screen



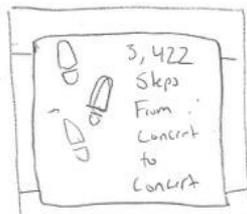
Messaging w/ voice-to-text



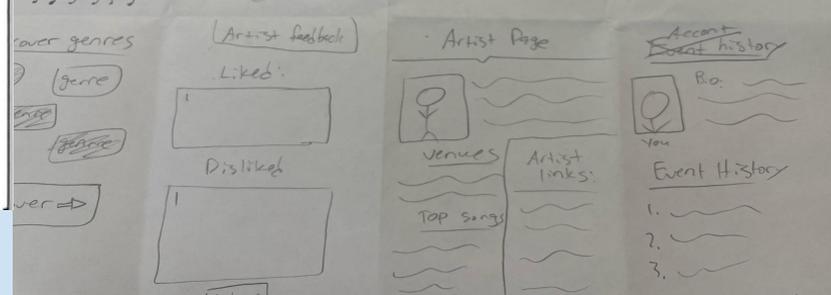
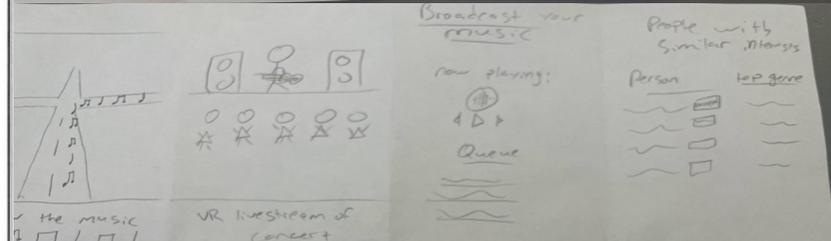
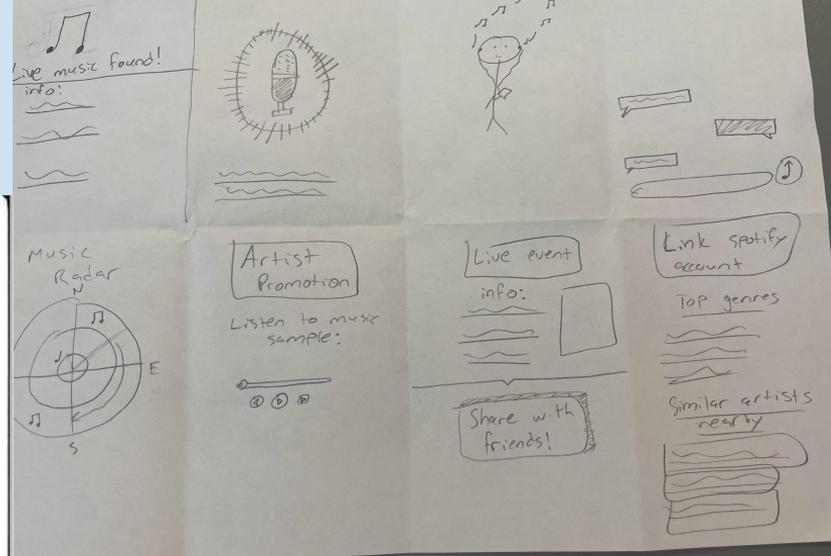
Live directions



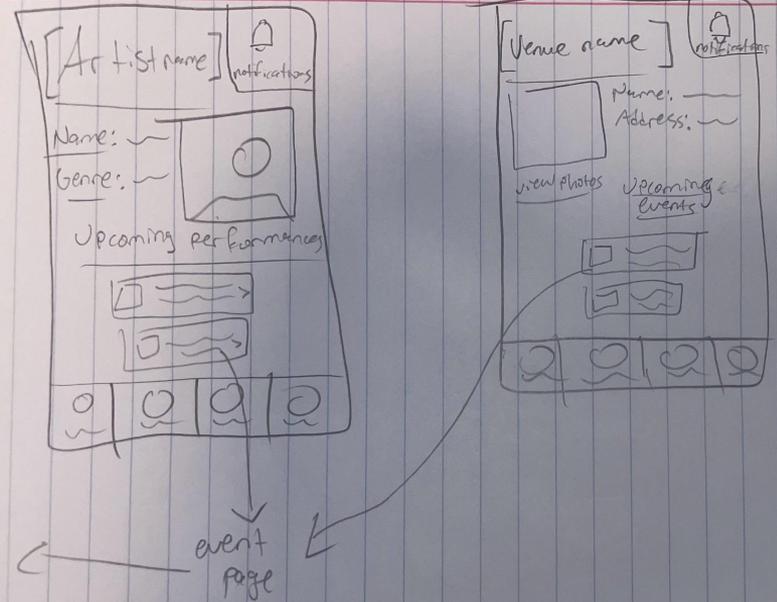
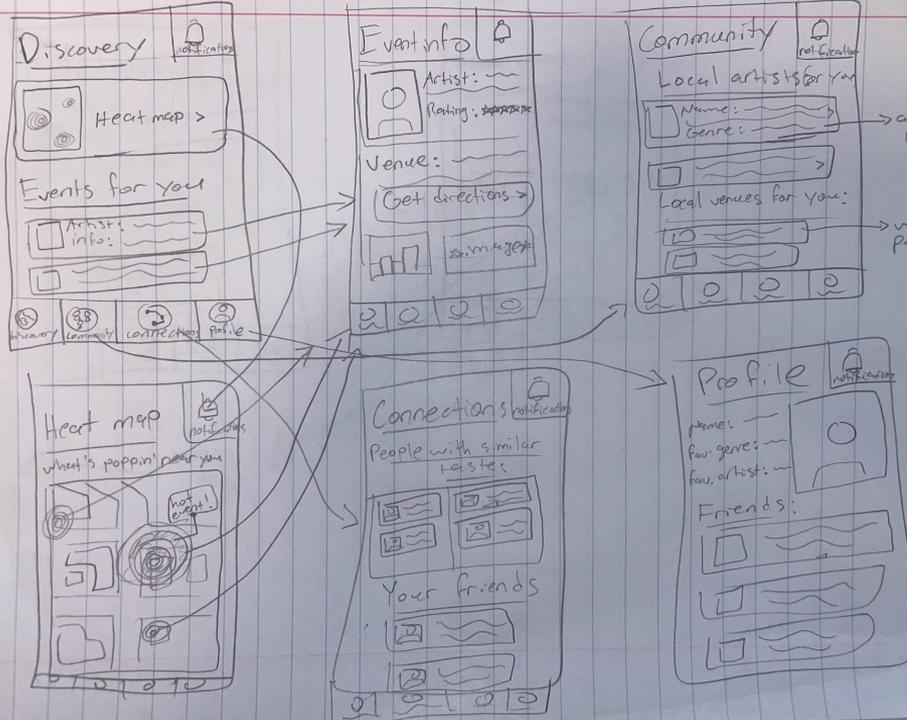
Displays nearby venues



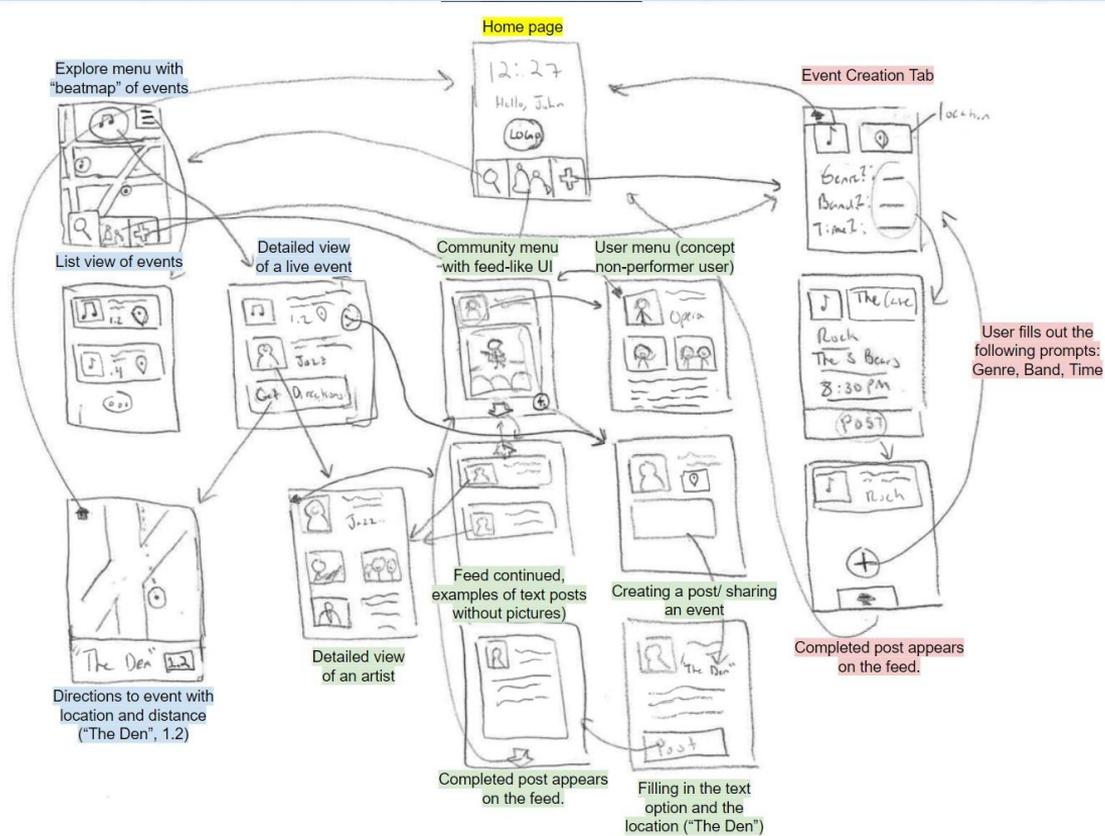
Teaches steps while concert hopping



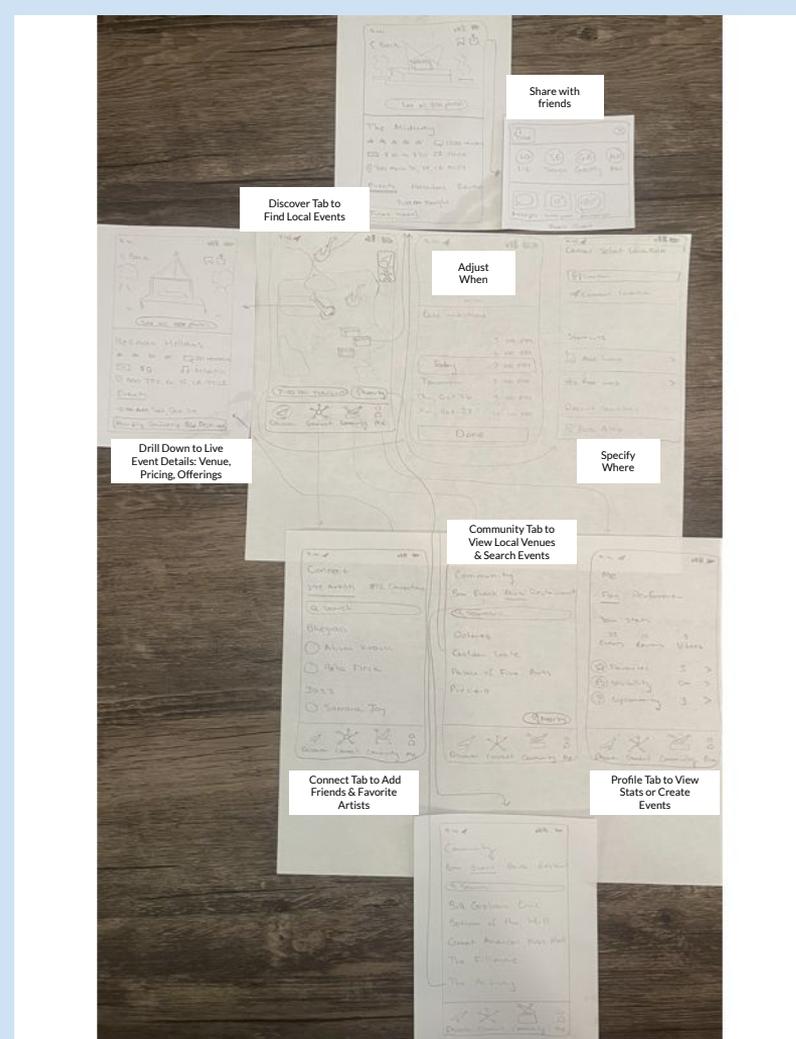
# Fleshed out Realizations

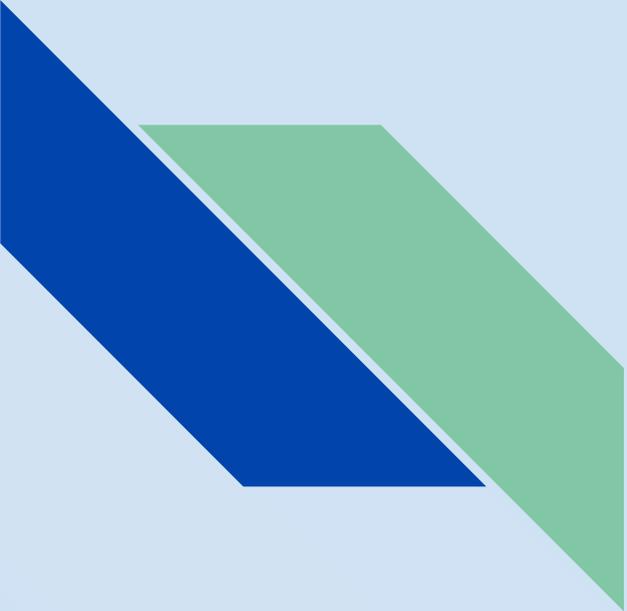


# Fleshed out Realizations



# Fleshed out Realizations





## Presentation at a Glance

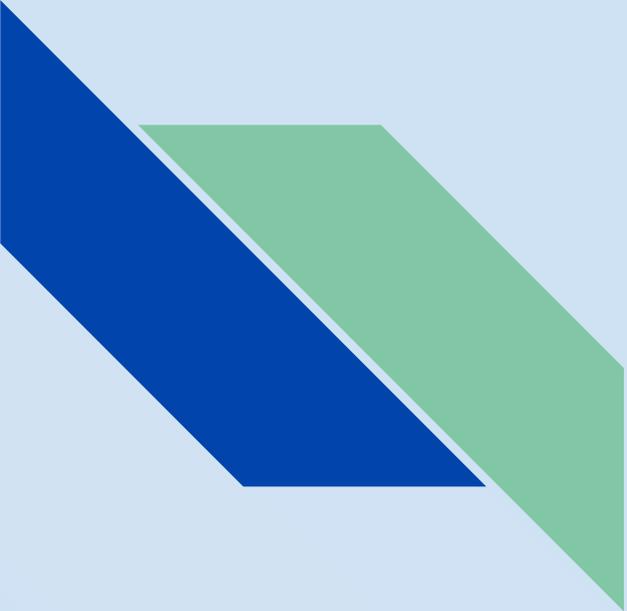
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# Selected interface and rationale

## Mobile App:

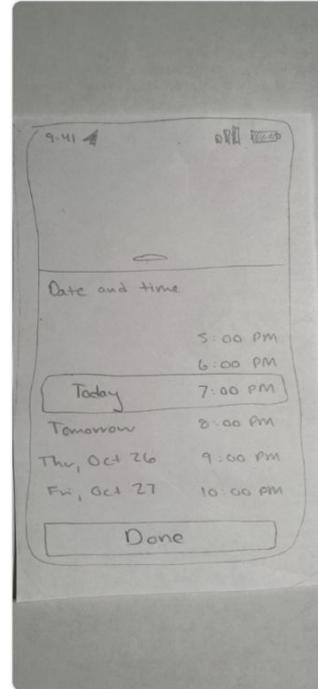
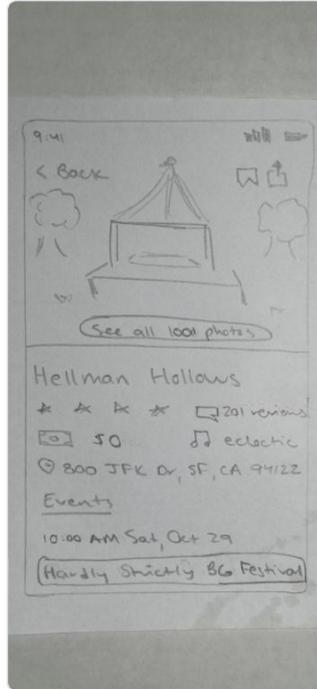
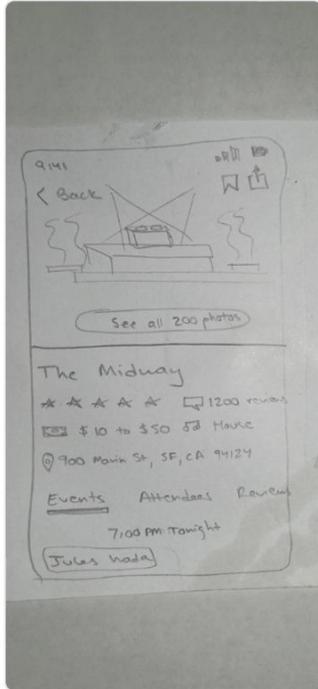
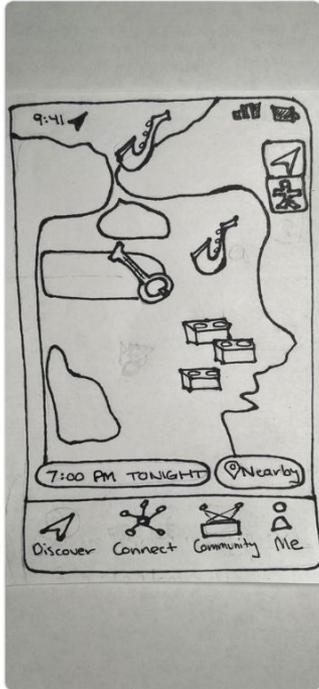
- Portable and easily accessible
- Bigger screen than a watch for looking at map displays and event pages
- Less of a need for AR / VR with the functionality that we have



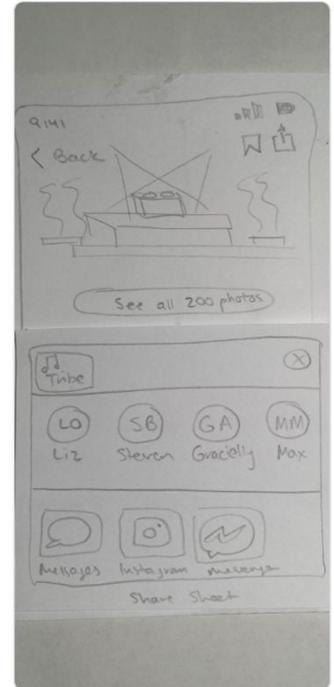
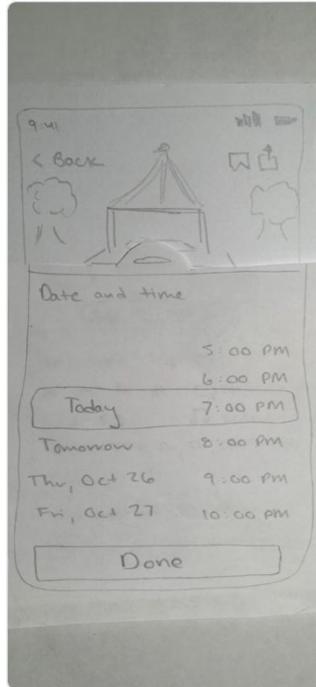
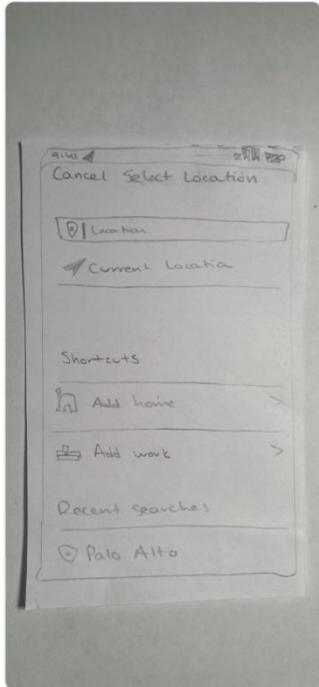
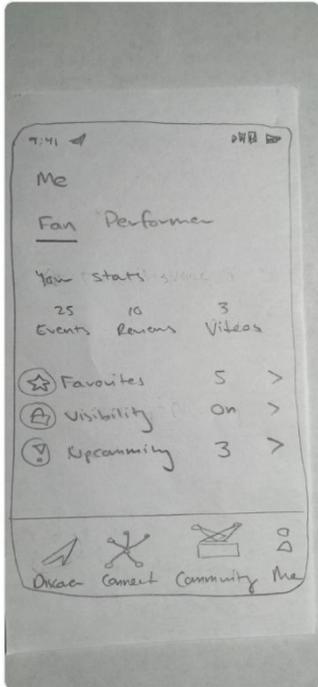
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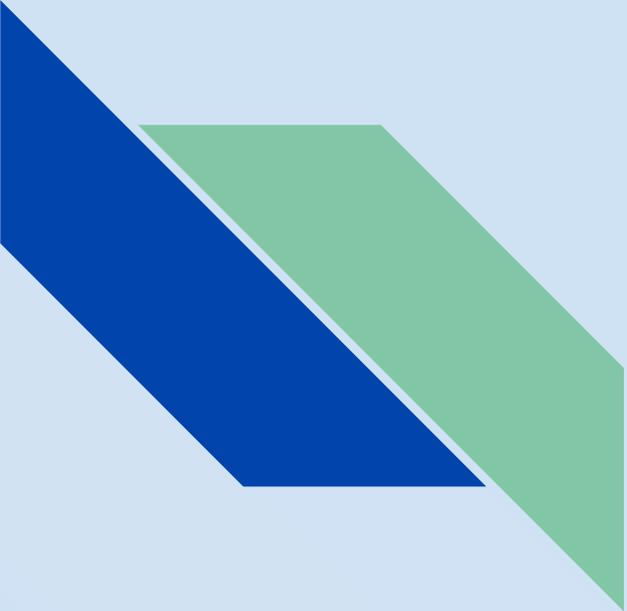
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# Low-Fi Prototype Excerpts



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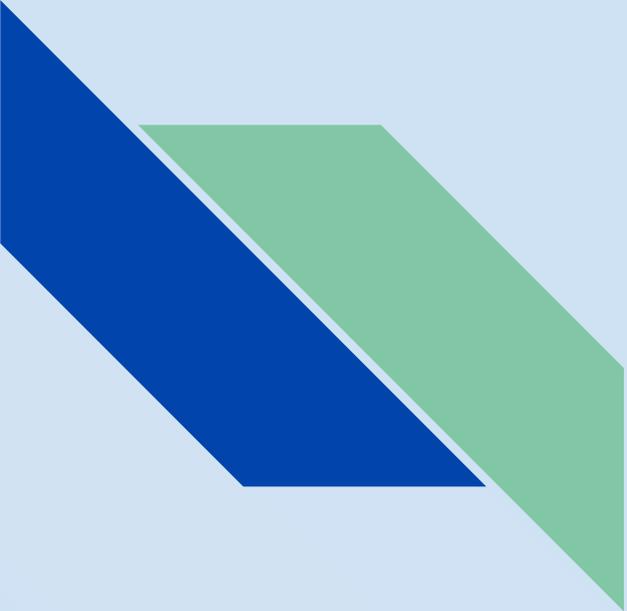
## Task Flows

Simple: Discovering a show near you to attend

Moderate 1: Sharing a live event

Moderate 2: Connecting with a friend

Complex: Creating a live event as a performer



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# Usability Testers

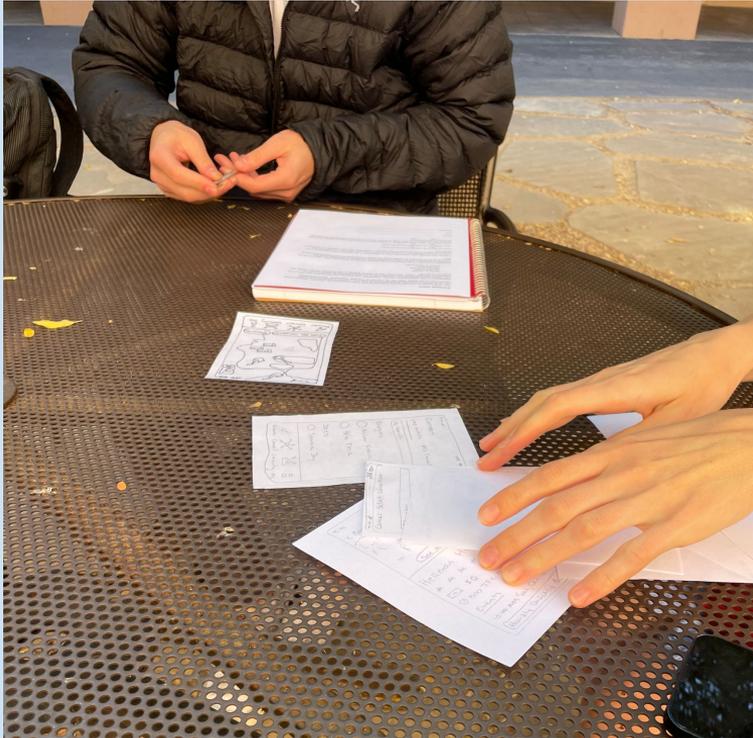


Participant 3: Catherine Mauras  
Demographics: Female, 30s, stay-at-home mom  
Recruitment: Friend  
Compensation: None

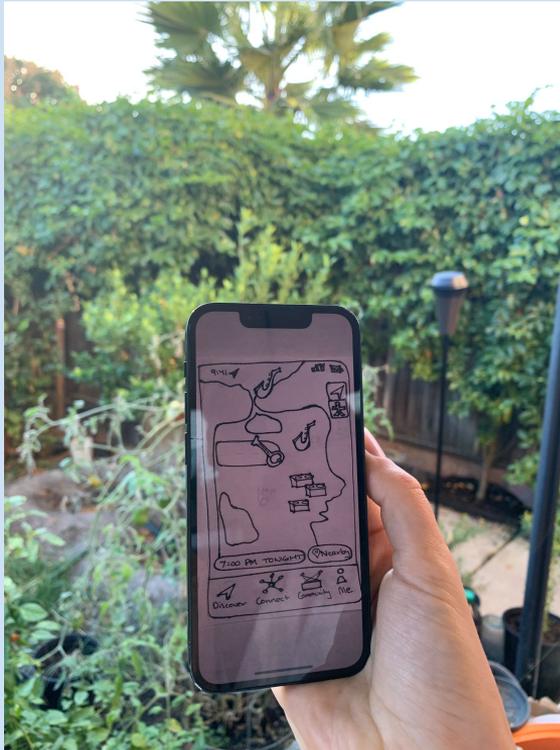


Participant 4: Raymond Tran  
Demographics: Male, 20s, University Student (UC Berkeley)  
Recruitment: Friend  
Compensation: None

# Usability Testing Methods: Environment



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# Usability Testing Methods: Procedure

Script-based usability testing

Physical paper prototype & POP prototype

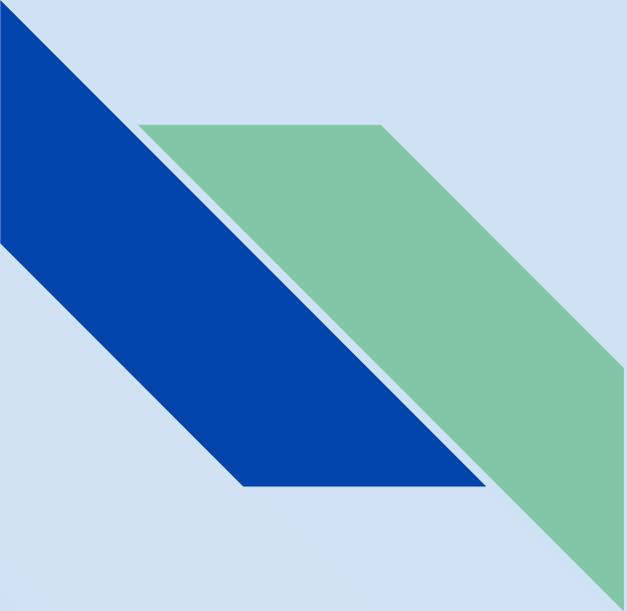
1 Facilitator, 1 Computer per test



# Usability Goals & Key Measurements

Learnability: Timed Performance of Key Tasks

Pleasantness: User Survey



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# Results & Discussion

**Big Picture:** Complex tasks were hard to complete with the interface. Simple and moderate tasks were intuitive and natural. Despite some difficulties, users reported higher rates of satisfaction with the prototype.

**Bottom-line:** Learnability of simple and moderate tasks was great. However, learnability of complex tasks needs to be improved. Many of the users found the experience of our prototype pleasing once they learned to navigate it.

The map feature in our prototype was compared to other social media platforms like Snapchat. Implementing features with familiar interfaces can help with usability.



## Results & Discussion

- Users were able to find events close to them but expressed a wish to sort through *more* concerts with a more *in-depth* U.I. (i.e sorting by genre)
- Users were confused with the difference between 'Community' and 'Connection' Tab and their respective purposes.



# Results & Discussion

## Implications:

- Users should be shown exactly where they need to go for major tasks
- Users may value additional features to make searching for events easier and allowing for a broader search range

## What we will change:

- Change labels and tabs to be more clear and distinct
- Allow users to add filters for genre and venue size

# Appendix





# Pros / Cons List

<b>Wearable Concept</b>	
<b>Pros</b>	<b>Cons</b>
<ul style="list-style-type: none"><li>• Works well with walking features, will align with a clientele meant to be on foot often.</li><li>• Can track steps when going from concert to concert which could be another interesting and fun feature for users and encourage concert hopping.</li><li>• Easy to display directions for users walking, allowing users to navigate without having to have their phone out the entire time.</li></ul>	<ul style="list-style-type: none"><li>• Not as accessible as an app, more people own a smartphone than a smart watch</li><li>• No way to play audio without headphones</li><li>• Can not display large amount of text, this may make reading messages difficult as well as seeing descriptions of venues</li><li>• Can not type, may be difficult to use certain features like making reviews and sending messages or rely too much on text-to-speech</li><li>• Creating events would be very difficult for above reasons</li><li>• No way to take pictures/ record audio which would be important for the social aspect of the app</li></ul>



# Pros / Cons List

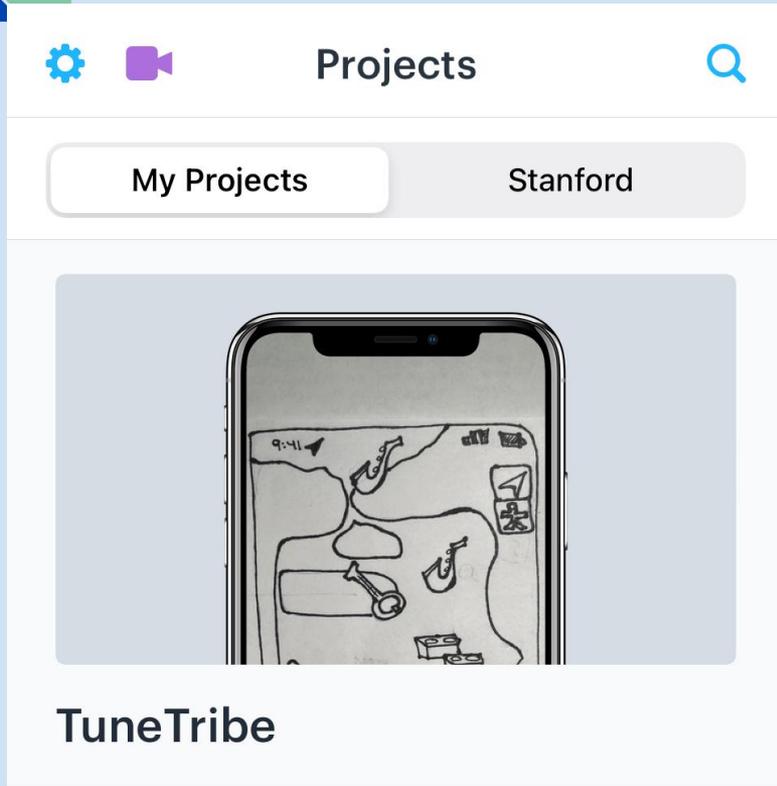
<b>Mobile App Concept</b>	
<b>Pros</b>	<b>Cons</b>
<ul style="list-style-type: none"><li>● Reward-based system encourages users to attend more events</li><li>● Notification of nearby events keeps users attention</li><li>● In-app communication with other users encourages connection by keeping it convenient</li><li>● In-app communication offers a risk-free a way to talk to new people</li><li>● Leaderboard further encourages users to engage with reward system</li><li>● Personalized message from event poster to people who attended their event encourages community among performers and audience</li></ul>	<ul style="list-style-type: none"><li>● Too many notifications may overwhelm or annoy users</li><li>● Rewards may be costly or not enticing enough</li><li>● In-app communication may lead to trolling, bullying, harassment</li><li>● Reward-based system may inadvertently deter users from using the app by confusing them</li><li>● If people promote their music or music-related business on the app too much, users may lose interest in app entirely</li></ul>

# Lo-Fi Paper Prototype



Frames on [Google Drive](#)

# Marvel POP Lo-Fi Prototype



[TuneTribe Prototype](#)



# Script

## Introduction

Hello! <Tester 2>, <Tester 3>, and I are students at Stanford and taking CS147 Introduction to Human Computer Interaction. We're conducting usability testing of a mobile application prototype. Would you have 15-20 minutes and be willing to participate?

*Request to sign consent form*

## Overview of Usability Testing via Paper Prototyping

We're using a technique called paper prototyping to test the usability. Here we have low fidelity drawings of each screen in the application, and you can interact with it in the same way you would an application on your mobile phone. I will be the facilitator, <Tester 2> will be the computer (mobile device in this case), and <Tester 3> will be the help system. If you get stuck, you can keep asking questions and receive responses in more detail from <Tester 3>.

As you interact with the prototype, please feel free to speak through what you're thinking and why you're performing certain interactions throughout the experience.



# Script Continued

The application is called TuneTribe, and it's designed for finding and sharing live events and connecting with other people, artists, and community. We have a list of tasks to try to complete using the prototype.

*Reveal list of TuneTribe tasks on separate sheet of paper*

## **Usability Test**

*Reminder: If participant gets stuck, facilitator only prompts participant to ask a question about what's confusing to the help system*

*Task 1: Simple #1*

*Task 2: Moderate #1*

*Task 3: Moderate #2*

For the next task, imagine you're a local musician and you'd like to use TuneTribe to promote an upcoming live event you have. How do you think you'd go about it?



# Script Continued

## *Task 4: Complex #1*

For the next task, imagine it's a different day. You've used TuneTribe once before and this is a new session.

## *Task 5: Simple #1 Repeat with New Type of Event*

## *Task 6: Moderate #1 Repeat*

## *Task 7: Moderate #2 Repeat*

Imagine you're a local artist this time.

## *Task 8: Complex #1 Repeat*

*\*\*\*If learnability is unclear, repeat tasks for a third time*

For the next task, imagine it's a different day. You've used TuneTribe twice before and this is a new session.



# Script Continued

*Task 9: Simple #1 Repeat with New Type of Event*

*Task 10: Moderate #1 Repeat*

*Task 11: Moderate #2 Repeat*

Imagine you're a local artist this time.

*Task 12: Complex #1 Repeat*

## **Wrap Up**

Thank you so much for your time!



# Log of Critical Incidents

- Don't see a filter for specific music type (2: add filter by genre)
- **Hard to tell the difference between connect and community** (1: rename 'connect' to 'friends')
- Don't know if connections are social or artists themselves (1)
- Don't know how to do the friends thing (duplicate of below)
- Confusing to get to friends (3: need to make friends more forefront than artists on connection tab)
- Confused as to where to go for an event listing as an artist (1: rename 'Me' profile tab to be more explicit)
- Learnability: was able to find another event the second time very quickly (positive event)
- Confused about person figure in map (1)
- **Pleasing: positive**
- **No settings** (2: add settings)
- **Reminds user of snapchat map**, which they like, would like to zoom in and out, icons are clear (positive event)
  - Noted that it was an intuitive and easy to use map, but mentioned they're comfortable with maps similar to it.
- Personally would never use community, doesn't seem like a social media app (2)
  - Was confused on why the community and connections tab were different, thought they should be the same tab and overlap
- **Mainly would utilize app to find events**



# Log of Critical Incidents

- **Create event screen unclear (4)**
  - Found it inefficient and strange, thought the event should come first, then the date and time
- Would like to see future events as well not just live events (3)
- Connecting with artists makes sense, not so much other people (1)
- Likes add home and add work feature so they can see events near their house (positive event)
- Wants a list mode for events sorted by proximity (1)
- Appreciated the map outline
- **Found the way to create an event was unintuitive**
- Was confused by the icons on the map
- After repeated use of the features, found it easier to navigate but wishes it was easy to use off the bat