Assignment 5
Low Fidelity Prototype

Introduction

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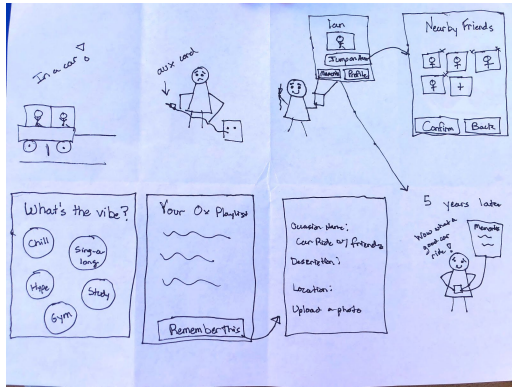## Introduction

Value Proposition

We want to enable people to become closer through shared music. We believe that our idea makes this goal easy and accessible. By automating the difficult and awkward parts, we let users begin focusing on their shared tastes immediately.
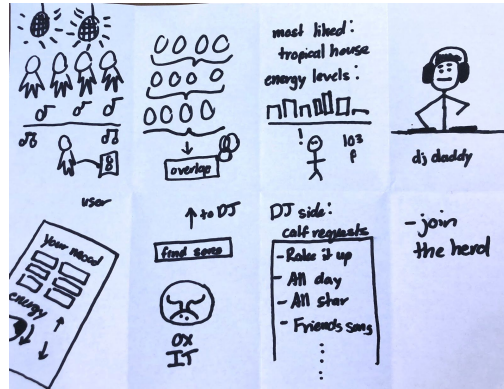
Proposition/Solution Overview

This solution grew out of many of the pain points which we discovered through our research. There are a few underlying ideas that are key to what we have created. The first is proximity: the app is designed to be most effective and impactful when in a shared space. The second is simplicity. The main functionality of the app requires at most three button presses: to automatically find who is around you, what the vibe of the room is, and finally, automatic curation. The last component we wanted to focus on was robustness of selection algorithm, which will be developed more in higher-fidelity versions of our prototype.
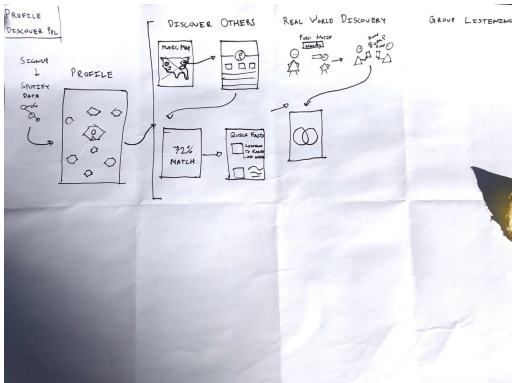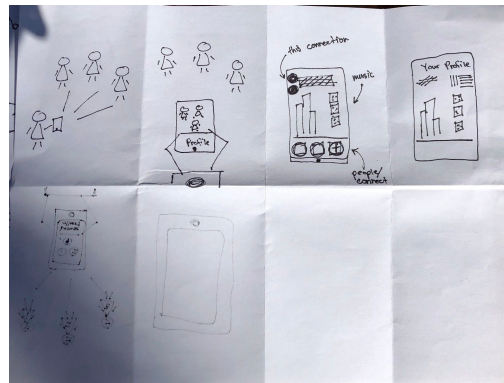
Sketches

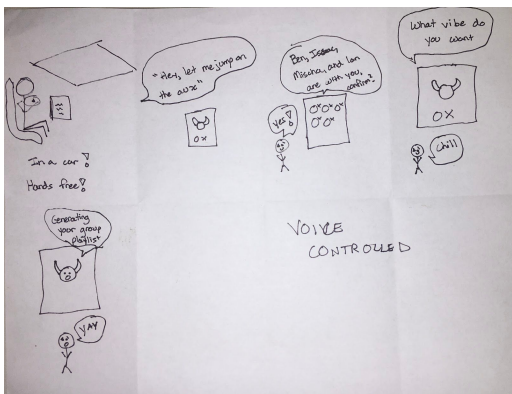## Concept sketches

Navigable mobile app

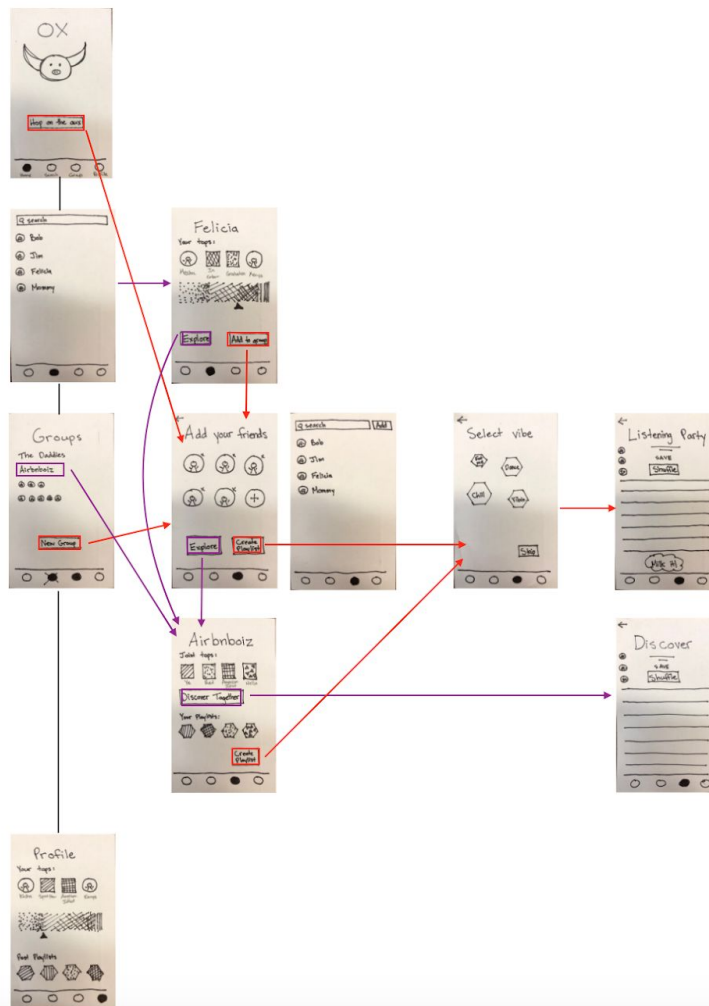DJ-centered integration

Discovery based app

Augmented reality interface
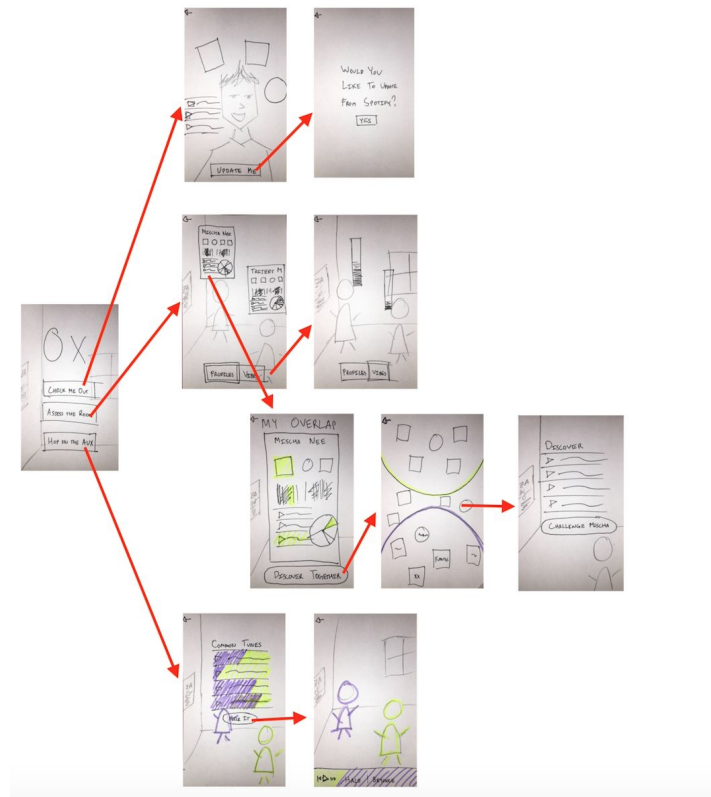

Voice command interface

Detailed sketch #1

The detailed design displayed below allows the user to navigate playlist generation and group discovery through a mobile visual interface with menu options and button that take the user to different features.

Detailed sketch #2

The detailed design below relies on interaction through Augmented Reality. The overall focus of the app is narrowed to the key components of finding overlap and common playlist generation on the spot.

Selected Interface Design

We ultimately selected our sketch #1 design for further testing. The choice was made very apparent upon evaluating the pros and cons of each:
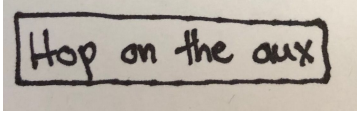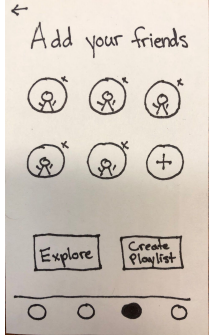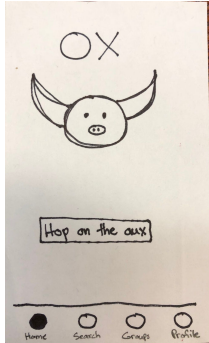
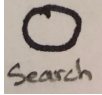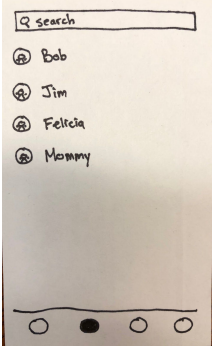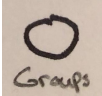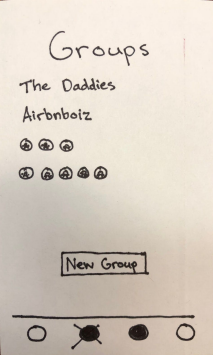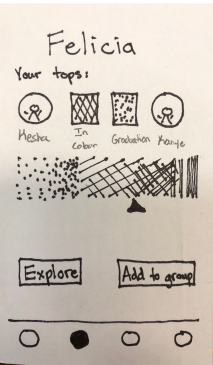| Design	Pros	Cons
Tab-based app (#1)	> Clear navigation > Allows inclusion of more features > Promotes long-term use (more groups and friends added) > Familiar interface	> Less immersive > Primary focus of listening parties might be lost
AR app (#2)	> Immersive > Focused feature set > More inventive display	> Limited functionality > Confusing/unfamiliar interface > Novel use at first, does not promote long-term

The tab-based app provides a platform which is far simpler to navigate and offers many more opportunities for including functionality and expanding the feature set. While it is not as clearly focused on simply creating listening parties, we believe the design puts enough emphasis on that task while allowing for other forms of interaction.

Prototype Description

Prototype Functionality

The prototype was operated manually, which worked surprisingly well. We made sure that whoever was operating the notecards did not provide help or input, and was simply the computer. It simulates the ability to network with other users, create a listening session, and explore personal and shared music.

Button on Dashboard	Description of Function	Screen for Function
Hop on the aux	The best part of the app. Instantly initializes a listening party for a group.	Add your friends ... Explore / Create Playlist
Home	Pretty standard home button. If not pushed, brings user back to main screen.	OX ... Hop on the aux ... Home Search Groups Profile

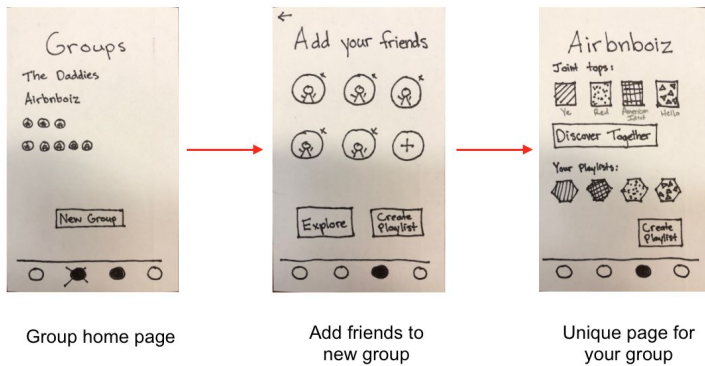|		
Search	Brings the user to the search page, which allows for exploration of other's music instead of playing.	Q search ⊙ Bob ⊙ Jim ⊙ Felicia ⊙ Mommy ○ ● ○ ○
Groups	Takes the user to the groups page, to view the already created groups.	Groups The Daddies Airbnboiz ⊙⊙⊙ ⊙⊙⊙⊙ New Group ○ ✖ ● ○
Profile	Takes the user to their personal profile.	Felicia Your tops: ⊙ ▨ ▨ ⊙ Kesha In Graduation Kanye Color Explore Add to group ○ ● ○ ○

Method

Our main goal was to distill the operation of the app to the lowest level possible, and see how users would interact with the essence of the application.
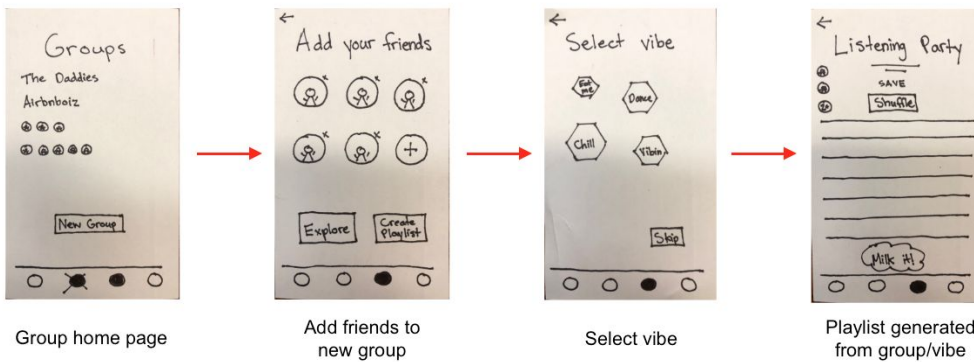
Tasks

Simple Task: Find songs of common interest with others
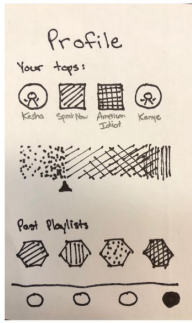
Subtask 1.1: Create a group with the people around you

| Group home page | Add friends to new group | Unique page for your group |

Subtask 1.2: Generate a 'chill' playlist with your group

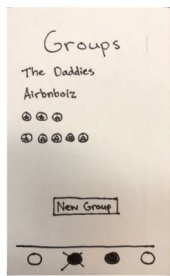| Group home page | Add friends to new group | Select vibe | Playlist generated from group/vibe |

Medium Task: Gain the "language" to talk about shared music tastes

Subtask 2.1: Tell me two facts about "your" music taste

Profile home page

Subtask 2.2: Find an album that everyone in the group "Airbnboiz" has listened too
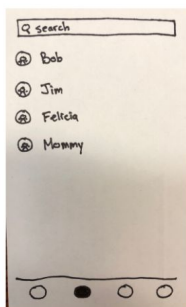

Group home page

Unique page for your group

Subtask 2.3: Navigate to Felicia's profile and tell us an artist that she likes
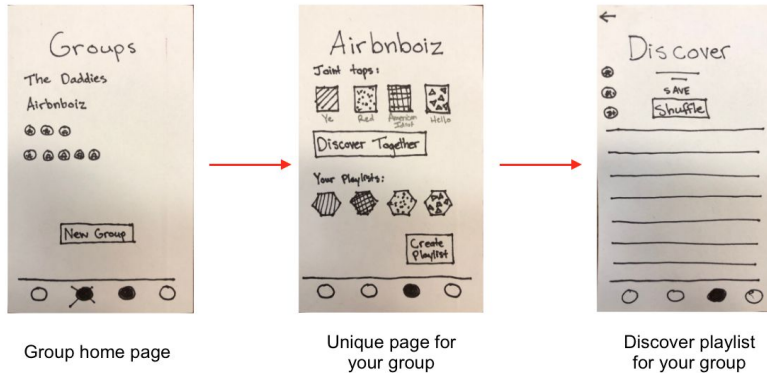

Search home page

Other person's profile

Complex Task: Discover new music with multiple other people

Subtask 3.1: Discover new music that the app thinks that the group "Airbnboiz" will like

| Group home page | Unique page for your group | Discover playlist for your group |

Procedure

We began by giving participants an overview of our app. We told them that we hope our app will facilitate easier selection, curation, and discovery of music in a group setting.Then, we asked our user to execute specific tasks using our app. We recorded the time it took to execute each task and observed any incidents that occured along the way. Afterwards, we asked them four questions to debrief their experience.

Task Measures

Success: The user completes the task and subtasks with little to no confusion.

Error: The user gets confused or is unable to complete the task due to a user flow error.

Timing: How fast the user is able to complete the task.

Team Member Roles

Facilitator (Mischa): This person was the sherpa/spiritual guide of the interview

Timer (Cody): Often the facilitator as well

Notetaker (Isaac): Paid incredibly close attention to the user themselves

Computer (Ian): Operated the app. We opted for a manual approach.

Participants + Environment

For our participants, we tried to select people who are not avid DJs or music curators.

Our first participant was a Stanford Student. We approached her near white plaza and asked her if she wanted to participate in our study and to briefly describe her relationship to music. We offered to compensate her with coffee, but she declined.

For our second participant, we wanted to try and interview a recent college grad. One's social life changes somewhat drastically and once you leave undergrad so we wanted to see if our app would have a similar appeal. We approached this participant in Starbucks and offered to buy him coffee as compensation.

For our third participant, we were able to get a researcher who works in one of the labs in Shriram. She expressed many of the same sentiments that we have been seeing throughout the entire quarter, most notably a sense of helplessness at becoming better at choosing music.

Results

- Every single task was successfully completed
- Most of the confusion came from the creation and saving of groups, it is definitely something that we will have to revisit in our next prototype
    - Almost everyone created a group incorrectly. They expected the "nearby" people to work like airdrop where you had to select people directly.
- "I love the personal profile and the way that the visualization works" - Participant #1
- People expressed concern about where all of the information came from, and they were also interested in how the app actually generated the playlist. Providing more relevant information in the app is something that we will explore further.
- Overall, people really enjoyed the profile page, but they wished that the visualizations of music taste were more explicit in what they were actually showing.
- People were confused by what the semantics of "explore" actually meant. They weren't sure if it meant to explore the contents of a group or explore new music.

- Feature Suggestion:
  - Some kind of better way to remember the playlists and associate them with groups after you generate them

Task Execution Timing

	Participant 1	Participant 2	Participant 3
"Create a group with the people around you"	0:55	0:33	0:37
"Generate a 'chill' playlist with group"	0:13	0:13	0:16
"Tell me two facts about 'your' music taste"	0:32	0:25	0:24
"Find an album that everyone in the group 'Airbnboiz' has listened too"	0:10	0:25	0:21
"Navigate to Felicia's profile and tell us an artist that she likes"	0:11	0:19	0:13
"Discover new music that the app thinks that the group 'Airbnboiz' will like"	0:22	0:15	0:17

Discussion

This activity was much more helpful than we had initially anticipated, and gave a much needed perspective shift. While we are overall happy with how quickly everyone was able to accomplish most of the tasks, there are a good number of areas that need clear improvement.

Going forward, we would really like to zero in on how the explore feature plays into the rest of the app. This was a major pain point for many users. Better defining what it was intended to do, and executing more accurately on that vision, is something we are going to focus on. Likewise, We would like to bring more clarity and simplicity to groups themselves. Right now, it is easy for us (the creators) to navigate both the act of group creation and management, but it was not very clear for a random user. We need to make it more intuitive.

However, there were many portions which shined. Navigating the app was seamless, actually playing music was simple, and browsing other users was very simple. Many of our designs can be found in some of the more popular apps out there, so we think that familiarity translates well. Overall, using this ultra-low fidelity approach to testing was informative and helpful in defining our roadmap going forward.

Appendix

Incidence Report

Overall, we found a few recurring pain points that we will have to address going forward. The main one deals with the functionality of the "explore" button, as well as a better group creation page. However, there were a number of happy incidences as well, which is lovely.

Good

Bad

Participant 1

Incident	Severity

When doing first task, asked "how do you make a playlist?". Wording not clear	3
When making a group, the interface is confusing. How are these people selected? Are they chosen by default? How does this page work overall?	3
confusing wording on the group page	2
What does the explore button lead to? What purpose and result does it have?	4
User was very confused as to how to save a new group once one is created	4
Confused by the wording of "your tops"	1
Was very intrigued by the profile page	2
Liked how you got to select a vibe	3
Liked the buttons on the bottom of the screen for navigation	3
Was excited to see what songs the app selected for the group	2

Participant 2

Incident	Severity
Confused by which is album vs. song on profile	2
Unlabeled gradient bar (intuitively understood that showed where his music taste fit in) but wanted to know more	2
Forget tab buttons. Only labeled on home page so went back every time	3
Expected search to search artists, songs, and people (like Spotify). Didn't lead to difficulties because Felicia immediately on screen	4

Confused by meaning of "facts" in question	1
Loved how easy it was to create a playlist, said the app was perfect for someone like him	4
Was intrigued by the profiles and wanted to explore more	2

Participant 3

Incident	Severity
Confused by the operation of explore	4
Confused by add friends page	4
Seemed confused by how permanent groups are	2
Curious how algorithm actually works	1
Slightly confused with group info	2
Happy with the level of info on profile page	3
Thought vibe was a nice touch	1
Commented on how oxen were cute	2

Consent Forms

(1446)