

# Q

## Sharing Music

Sam T, Alec A, Yvan Q

### Initial POV

Our POV from last class was about Arianna, a typical college student. We were surprised to learn that she gets the majority of her music recommendations from one person. We formulated that it would be game-changing to connect her more closely to that person's music collection, tastes, and interests.

### Additional Needfinding

After last week's presentation we set out to find a more diverse group of interviewees. Erik is both a musician and a meticulous audiophile, who is incredibly passionate about the way he listens to music. Emi is a world-class snowboarder from Scotland who researches herpes. She frequents metal concerts, and though music plays an important role in her life (almost spiritual) she doesn't actively seek it out using technology; in fact, she refuses to use anything other than speakers. Katie is a declared physics major who was the national champion in Lincoln-Douglass debate. We chose her because we had absolutely no idea what role music played in her life. She seemed very eager to share, though it became clear that she didn't have much experience with hardware (owns cheap Skullcandy headphones because "if I was going to splurge I would have bought Beats").

### More POVS

#### **Erik:**

We met Erik, an audiophile and musician. We were surprised to find out that Erik gets his music almost exclusively from people around him. He has very specific tastes and is extremely methodical about how he listens. He gets much of his new music from Ben, (the audio engineer). It would be gamechanging to make having highly particular tastes less work, in terms of both playback and finding music.

#### **Colette:**

We met Colette, a typical sophomore who frequents frat parties. We were surprised to find out that she doesn't care what music gets put on at frat parties (because she's intoxicated and focused on dancing) but still thinks it sucks. It would be gamechanging to give her a way to influence the music being played around her without having to work.

#### **Emi:**

We met Emi, a snowboarding scottish virologist who actively seeks out concerts. We were surprised to find out that, where she lived, has a big music scene and everyone has more niche music tastes, which are amplified by everyone around them. It would be gamechanging to find a way for people with music tastes in similar niches to connect, share, and mobilize.

## How Might Wes

### **Erik:**

- Connect musician to promoters
- Make finding “good” music less tedious
- Make the process of playing music easier
- Better curating their uber niche tastes
- Connect people to others who share their tastes
- Improve the mode of delivery (Erik talked about testing 10-15 pairs of in ear headphones)
- Change Erik’s tastes (make him love Big Brother)
- Give Erik a venue to discuss music with people who share his interests.
- Make the music around Erik more diverse
- Understand why Erik’s music tastes are so different from those around him?
- Change Erik’s environment to better reflect his tastes
- Give Erik less choice
- Assumed: Erik enjoys working for his music:
  - Make it even harder to find good music “less is more” (stockholm syndrome)
  - Give Erik a more, direct way to work for obscure music.
- Give musicians a way to find the largest concentration of niche listeners

### **Colette:**

- Gamify playlist creating
- Make playlists less dependent on a single person
- Social feedback on the music (party ratings!)
- Have more professionals and less amateurs involved in music curation
- Let someone with a song stuck in their head have it played?
- Make the queue a popularity contest?
- Crowdsourcing music curation
- Assumption: music gets boring: Make music get boring less quickly
  - Automatically remix the same song so it gets less boring over the same amount of time.
- Assumption: social pressure plays a role in who controls what: Take the social aspect out of music curation
- Map the associated emotions to music
- Reduce the amount of music played so that music becomes a commodity and not noise pollution
- Do we need music in social settings?
- Can we have computers write music live? (Social music is different from concert music)
- Require everyone to become a musician
- Remove the social pressure to hate all popular music

### **Emi:**

- Group niches together in a way that works for people within those niches
- Remove music “dead-zones” (less polarization in the music scene)

- Break the pop music culture into niches
- Help Emi share what she loves
- Give Emi a greater platform to connect to people and to stay connected to them
- Help Emi promote bands she loves
- Help Emi share her vast knowledge about bands, venues, and sub cultures
- Help make Emi's love more universal
- Insulate other people from the corrosive elements of hyper-commercialized music
- Give her a way to meaningfully interact musically with modern technology
- Help her make music experiences better for everyone by leveraging her insights (i.e. parties)
- Find people with interesting tastes and leverage her vast knowledge of music to build more meaningful relationships

### **Best HMWs**

**How might we** connect musicians to each other and listeners around them? (Erik/Emi)

**How might we** make music listening more social and less labor intensive? (Erik/Colette)

**How might we** keep music from getting old? (Colette)

### **Solutions**

**For full list see appendix**

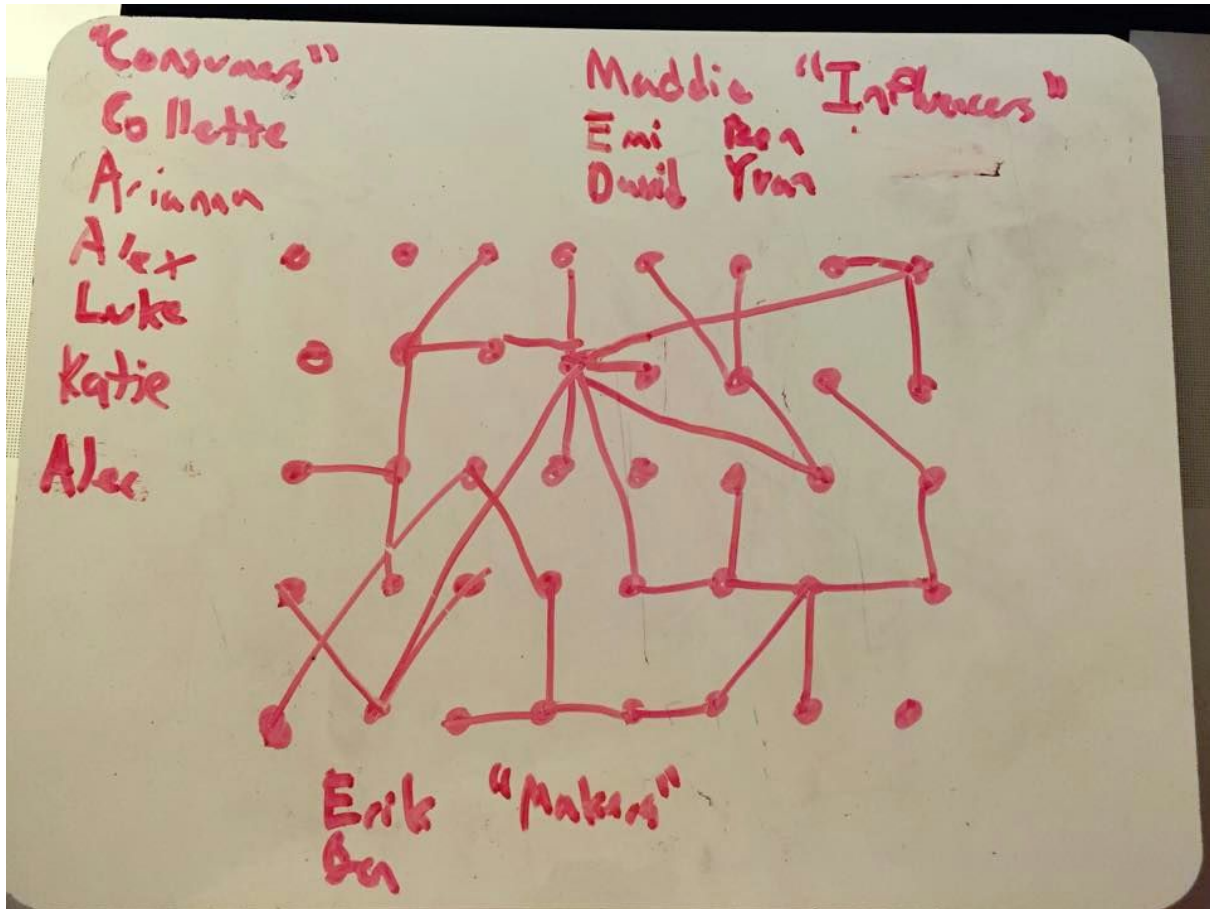
We spent about three hours discussing the roles of our various POV groups in terms of network dynamics and realized that a choice few “influencers” have a vast influence on what most people listen to (i.e. everyone’s “one friend” they get music from is shared by many others). So in effect, our solutions focused on ways to connect these people with as many “casuals” (people who passively absorb music) as possible. In addition to those two groups, there is another outlier of people who view music as an art and want to make the listening experience as pure as possible. This group tends to have more niche tastes, and also overlaps significantly with musicians. Keeping this in mind, another goal was to connect these “makers” with other listeners or musicians with similar niche tastes. Below is a rough visualization of this network (dots = users, lines = musical connection).

### **Best Solutions**

Give musicians a way to collaborate live without being physically together, let listeners tune in online (follow feature) - (HMW 2)

“Flash” concerts with live collaborative mixing and performing - (HMW 2)

Social radio over a mesh network of speakers (gamify local music sharing) semi-anonymous, voting on songs pushes it higher on queue - (HMW 1)



### Prototyping

First up, **Rave**: spontaneous concerts. You set a time, a place, and a genre. Strangers meet up, dance, and leave. Meet people. Enjoy music. Share an unforgettable experience. You can also use this to plan events with friends and advertise parties. The size of your raves gives your tag name "cred" meaning that your events get more support (feedback loop).

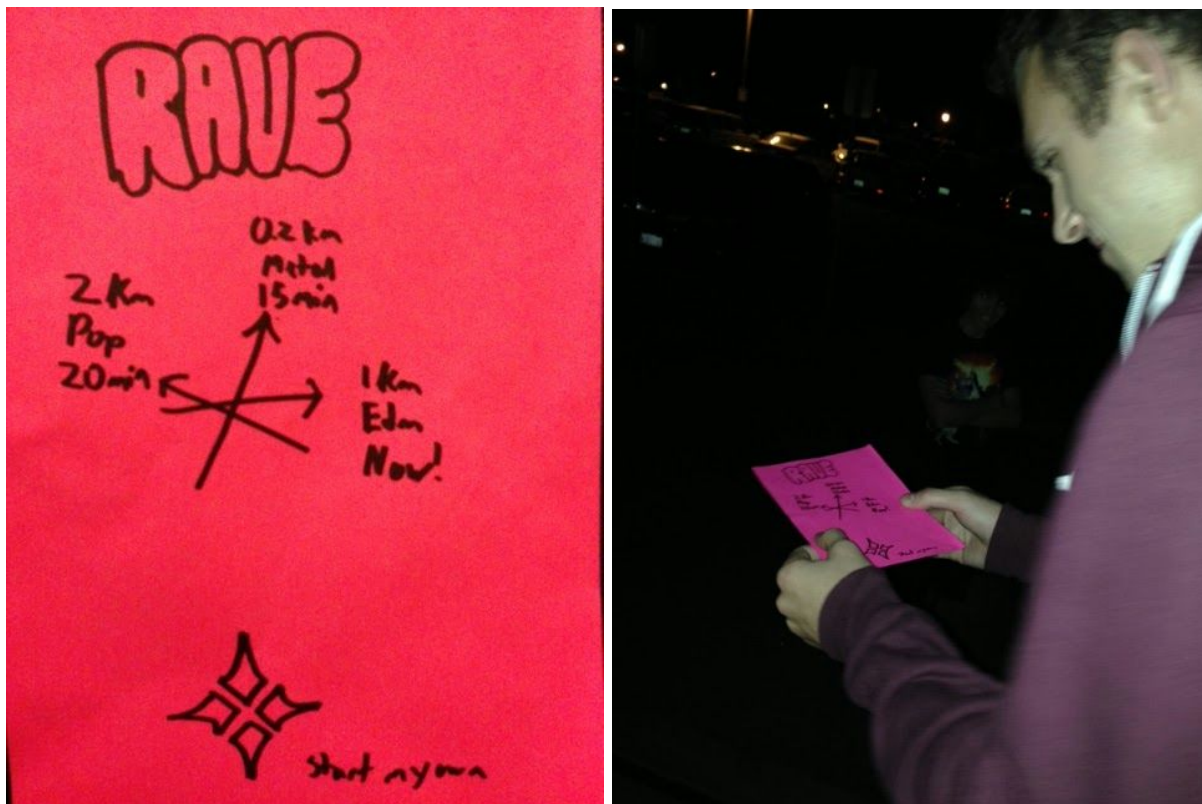
Assumptions: People like to go to raves/concerts. People like meeting people. However people are intimidated by both of these.

We drew up all three prototypes on paper with a sharpie, drawing from Alec's and my experience making apps. Pictures of all screens are below.

To test this, we found someone on their way to EBF and asked him to interact with it and acted out how it would work. We had a mini (silent) rave!

Our rave was an absolute flop. 4 guys and no music just isn't Coachella. However, our app was built with flops in mind and it would simply have lowered my "cred" meaning that until I attend good raves my raves will appear as "dubious" to other users. The interface, however, was very clean and usable. He really appreciated the details (the start rave icon etc.).

His feedback was very positive. He would use it if it existed. It would be an interesting cultural experience if nothing else.



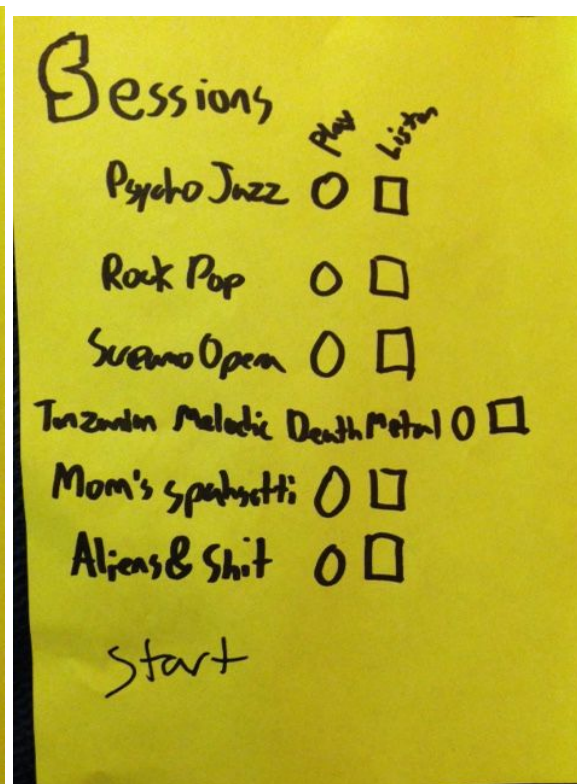
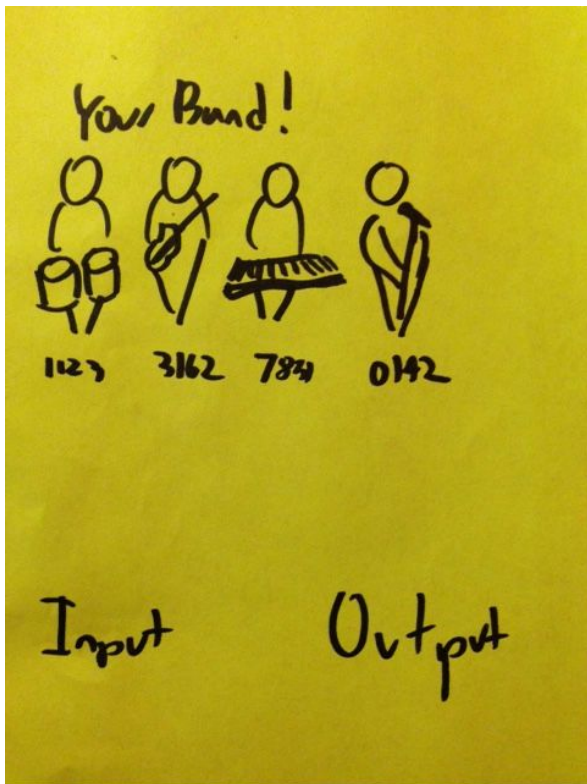
**Sessions:** Online tool for musical collaboration and exploration. Set up a room, join strangers or friends, and play music. Or just go into a random room and listen. (Listeners are allowed to clap) which is part of the recording. An algorithm records all the inputs individually and together, generating several tracks produced in a variety of manners.

**Assumptions:** Musicians like collaborating. People like music that is unique. It is currently difficult for musicians to find people to collaborate with.

Yvan played the piano and two guitarists of varying experience levels used guitar hero guitars. They found the interface very intuitive and once again complimented my art.

In terms of feedback both of our users doubted that they would actually use it. The interface was neat and it would definitely have uses but neither saw themselves using it personally which was a really bad sign. Overall, the success of the app would probably depend heavily on our “digital producer” ai program and its ability to turn shoddy asynchronous music into something tolerable.

With respect to assumptions the issue probably is not as large as we thought it was. (Demonstrated by neither of our testers being inclined to use it). We also assumed communication would sort of happen, which probably is not fair.



**Q:** Crowdsourced local queuing over a mesh network. Gamify the curating process. Anyone can push songs. Anyone can vote on them. Anyone can join any network. Algorithmically, we favor the senior members of the group.

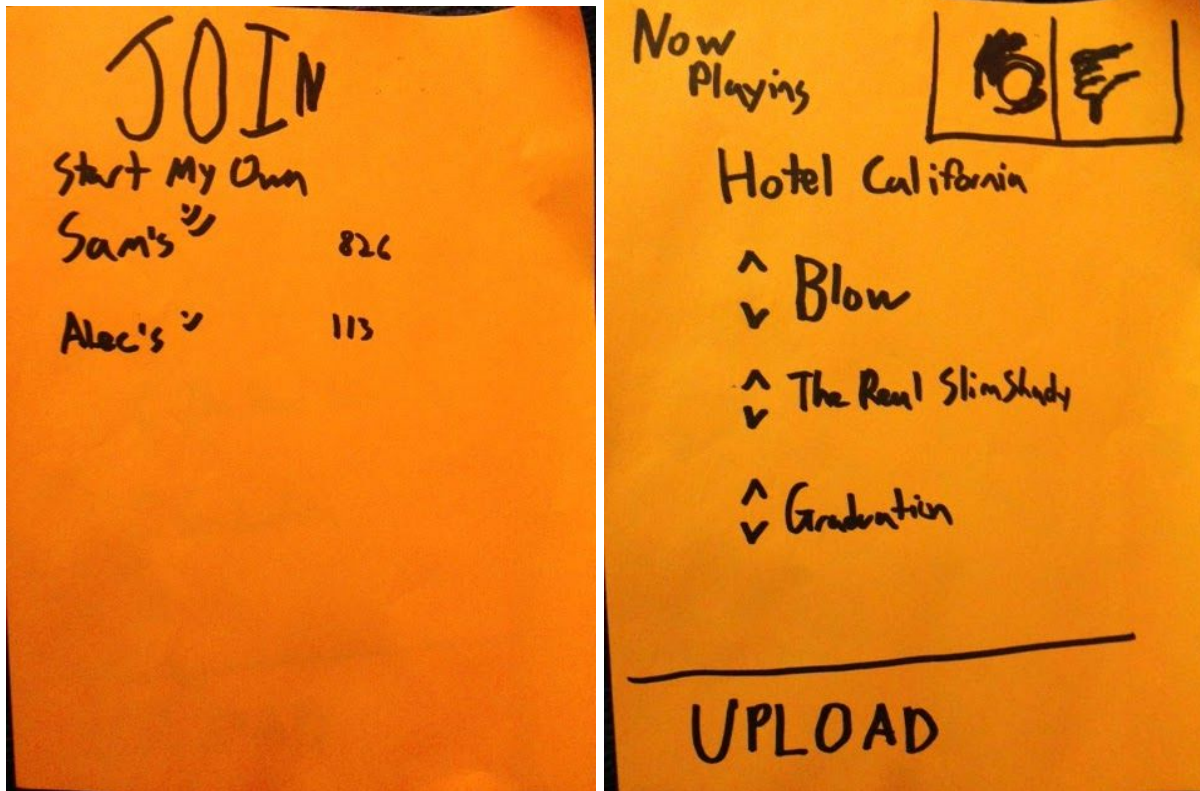
Assumptions: Curating music is difficult. People care about the music being played. People get music from friends.

We pitched it to two random guys watching American Horror story. Both were a tad hesitant to commit to helping us with this but warmed up quickly. They found the ui to be very intuitive but suggested that we added a “now playing” feature to the chat room screen. (We think we may expand this into a recently played drop down menu). The upvoting and downvoting songs in the queue reminded them of Yik Yak.

They had very insightful questions, mostly about the degree of control the founder of the “mesh” would have over what was being played. We said that the founder would have a much more heavily weighted vote than any other members. Every issue they raised we were able to address. This was by far the most positive feedback we received.

Most of our assumptions were reinforced by our testers. We learned that we care more about music than most people.





### Favorite

Q had the most positive reception among the testers and seemed the most universally accessible. We think that this will be a good project for us, with plenty of interface to design. Conceptually, Rave seemed the most unique, and we will brainstorm integrating elements of it into our final product.

### Appendix

#### Full List of Solutions

1:

- autocrurate from local devices using profiles on a server
- really really good ai curation of songs
- use songs played around people to influence whatever comes on
- make the queue a popularity contest
- Have people vote on songs on a common queue
- let people build up “rep” by choosing songs that people like
- allow music webs to grow organically (let people connect speakers and devices in a virtual web)
- digital amateur “radio” stations with no top stations
- make music a giant social network
- claim: unequal music access is the core problem:
  - nationalize music lessons so all children have access and not just the rich



- crowdsource music education
- chill sessions with random people with the same music tastes
- claim: choice makes consumers less satisfied
  - allow professionals to choose music

**2:**

- Show musicians places with largest concentrations of niche listeners
- Allow listeners to tune into live concerts
- Give musicians a way to collaborate without being physically together
- Connect musicians with similar musicians around them
- allow listeners to request songs live
- Network for musicians to “pitch” their mixtapes directly to influencers (extroverts with large social circles and active listening habits)
- flash concerts
- Extension for giving feedback from music back to artists.
- built in experimental virtual amps
- Bumper stickers
- A network of graphic designers and coordinated postering campaign.
- AI based recommendations

**3:**

- AI automatically remixes songs
- Have different groups of people curate each others parties.
- add an element of randomness to the genre of music
- make music available cyclically so you cannot overplay a song
- allow people to follow whatever their favorite bar or club is playing
- have online live djing sessions that people can sign in to
- get emailed a daily list of songs by an anonymous user
- Turing dj test (users don't know if the dj is a computer or human)
- take all user tastes and chooses similar songs
- mess with the tempo
- Make an app for keeping track of how much each user likes each song based off manual ratings and heart rate
- collect as much data as possible on both music and the user then query for any correlations then use the correlations to drive recommendations