Requirements

CS-422 UI Design, Prof Andruid Kerne (Fall 2024)

Methods

Methods Employed to Gather Data:

We used a combination of **semi-structured interviews** and **direct observations** to gather qualitative data on users' interaction with Tapify. This approach allowed us to explore user behavior, preferences, and frustrations in depth.

Each interview lasted 30-45 minutes. We asked open-ended questions while allowing participants to elaborate based on their experiences. In the observation session where participants used their current music app for 2 quick tasks that users generally perform on music apps while narrating their thoughts (think-aloud method).

Participants:

Google form link to the consent form used by our group - Consent Form for Music Application

<u>Usage Study</u>

I performed 4 interviews and one observation activity.

Interview 1 - Age - 25 | Gender - Male | Profession - Product Designer

Interview 2 - Age - 45 | Gender - Female | Profession - Marketing manager

Interview 3 - Age - 22 | Gender - Male | Profession - UIC Graduate Student

Interview 4 - Age - 27 | Gender - Female | Profession - Finance analyst

Observation Activity done by interviewee 1 - How they navigated the app to create playlists,

How they modified music queues during use

Questions Asked

- How often do you use music apps?
- Why do you usually listen to music?
- What's your primary use?
- What is your most frequently used music app?
- Do you pay for (music app)? Why? Why not? What features do you pay for?
- How do you decide what to listen to?

- What environment(s) / circumstances do you tend to use it in?
- What is an experience you find frustrating to do in your music app?
- Are there any particular songs that you listen to frequently? How do you organize them?
- Do you collaborate on playlists or share music with friends?
- How important are recommendations in your music app?
- What features do you wish your music app had? Would you pay if a premium version of an application includes these features?

Data Recording

Interviews: Notes transcribed, and if consented audio recorded for future analysis.

Observations: Screen recording was done on the interviewer's device using the user's most frequent music app and detailed notes to capture user interactions and non-verbal cues as interviewee described the activity verbally.

Data Analysis

Quotes - "I get annoyed when I am trying to reorder my playlist but it ends up switching songs in between and I end up not getting to listen to either song properly"

"Youtube music has this weird feature when I have to choose between 'play next' and 'add to queue.' It seems like both of them should do the same thing"

Common Behavior: All participants used playlist customization to adjust their music based on their activities (writing, socializing, relaxing). The ability to **reorder** songs in real-time was critical for maintaining focus or keeping a social vibe intact.

Significant Phenomenon: Even participants who weren't as tech-focused find value in **drag-and-drop** features that made playlist customization more intuitive

Quotes - "I like to share my playlists with my friends but I can't collaborate with multiple people. I can never see who adds which songs."

"I don't really create playlists with other people. It's mostly just me listening to songs. Every once in a while I share tracks I think my friends would like which is easy enough to do in Spotify"

Common Behavior: Younger participants (20-23) and those who valued social sharing preferred apps that allowed them to **collaborate on playlists**. Being able to invite friends, contribute songs, and engage in real-time made the app experience more enjoyable.

Significant Phenomenon: The demand for collaborative features was **age-dependent**, with younger users more likely to use shared playlists. However, some participants expressed concerns over **control**, indicating a need for **permissions management**.

Quote - "I have never really needed offline listening. The only time I ever do download songs is when I'm on a flight. Even then it's usually just before the flight takes off"

Less Usual Behavior: Although **offline listening** was a critical feature for some participants, it was not a high-priority feature for all. Less tech dependent valued this feature due to connectivity issues, but younger, more techie users didn't prioritize it.

Significant Phenomenon: Offline listening needs were **activity-specific**—travelers and workers in remote environments needed it more, while those with reliable connectivity rarely considered it.

Requirements Statements

- 1. As a user, I want an intuitive interface so that I can easily navigate the app and access my playlists without confusion.
- 2. As a user, I want advanced playlist customization options so that I can rearrange and edit my playlists in real-time without interrupting my workflow.
- 3. As a collaborative user, I want the ability to create shared playlists with friends so that we can all contribute songs and enjoy a collective music experience during social gatherings.
- 4. As a frequent traveler, I want seamless offline listening capabilities so that I can enjoy my music without relying on Wi-Fi or mobile data.
- 5. As a music enthusiast, I want non-intrusive, personalized recommendations so that I can discover new music that aligns with my taste without being overwhelmed by irrelevant suggestions.

Personas

David Scott



"I love making playlists that hype up my friends and keep the party going."

Job: Highschool Senior Location: Los Angeles, CA Music Listening Habits: 4 hours/day

Introvert	Extrovert
Thinking	Feeling
Sensing	Intuition

Friendly Tech-savvy Creative

- To navigate different playlists easily
- To be able to modify playlist on the go
- Share playlists easily with friends and followers, and discover what others are listening to

Frustrations

- . Too many options and features making it harder to quickly organize his playlists.
- Unable to modify queue with songs outside playlist
- . Difficult to share collab with friends for a shared music

Jake is known for bringing people together through music. Whether he's hanging out with friends, hosting a party, or heading to a weekend event, Jake loves curating the perfect playlist to match the vibe. Music is an important part of his daily routine, from listening to upbeat tracks on his commute to creating collaborative playlists for road trips with friends, and he's always looking for easy ways to share his creations and collaborate with others. Jake want an app that makes sharing, collaborating, and creating playlists a breeze, so he can focus on having fun and keeping his friends entertained.

Apps & Artists











Feature Preferences

Music Explo	oration	Favorites
Collaborativ	/e	Solo
		The state
Organisatio	n	Flexibility
Fully free	Ad-tolerant	Premium paid



Isabella Garcia



"I want a music app that lets me focus on my writing without making me feel lost in complicated menus."

Age: **36** Joh: Writer Location: London, UK Music Listening habits: 1 hour/day

Devices: Laptop (work)

Introvert Extrovert Thinking Feeling Sensing Intuition

Calm Organized Creative

Goals

- · To discover music on her own rather than being hombarded with recommendations
- Maintain a clutter-free interface
- To enjoy ad-free, uninterrupted listening

Frustrations

- · Unable to navigate her playlists easily
- Frequent irrelevant suggestions frustrate her
- . Inconsistent layout of the app landing screen

Bio

Isabella is a creative professional who loves writing in cozy cafes and at home. Music only plays a role in her work routine when she is restless, to provide the perfect ambiance for her creative process. She enjoys calm, soothing music that helps her focus. She prefers $\min[malism - an easy-to-use app that allows her to$ quickly access her favorite music without distractions. Isabella often feels lost when navigating through cluttered menus and features she doesn't use. She prefers curated, mood-based playlists, and is always on the lookout for fresh instrumental tunes to add to her collection.

Apps & Artists

► YouTube Music







Feature Preferences

Music Exploration Favorites Collaborative Organization Flexibility Fully Free Ad-tolerant Premium Paid



Scenario

Isabella has been struggling to get through her writing sessions for the past few months. Every time she sits down to write, her mind wanders, and the silence in her study makes it harder to concentrate. She recalls how music has helped her focus in the past and decides it's time to use Tapify to create a playlist that might reignite her inspiration. She opens the app on her laptop and sees the playlist tab, under which she navigates to the "Create New Playlist" option. The interface is simple where the playlist tab is there as soon as she opens the app.

Isabella adds her favorite instrumental tracks picking Ludovico Einaudi for his calming piano melodies, knowing they will help her relax, while Max Richter's minimalist compositions create the perfect balance between inspiration and focus. She finds it easy to search for these artists thanks to Tapify's global search bar that allows her to search for artists. songs, albums all under one search bar. She also finds that the recommendations provided are based on her previous listening habits but do not interfere with her search.

With the playlist playing softly in the background, Isabella finds herself slipping into a rhythm, words flowing more easily as the calming music sets the perfect atmosphere for creativity. When she finds that some of the ambient tracks are too upbeat, Tapify's drag-and-drop feature makes it easy for her to move these songs to the end of the queue, and get back to writing within seconds without interrupting her flow. With the perfect playlist guiding her, Isabella feels her creativity reignite, and she ends the writing session feeling more productive and inspired than she has in months.