

## Introduction

Music has become a vital form of self-expression and connection in today's interconnected world. Our research focuses on developing VibeStream, an innovative application that merges music streaming with social media, allowing users to share their musical tastes and discover new tracks collaboratively. This study aims to identify and understand the design requirements for this unique platform by examining user preferences and behaviors through interviews and surveys with various types of individuals. By gathering insights into current music consumption patterns and social media interactions, we seek to uncover essential design elements that will enhance user engagement and satisfaction. The findings from this research will provide actionable guidelines to ensure VibeStream is both user-friendly and valuable. This report summarizes our research findings and offers insights that will guide the development of an engaging, personalized user experience on VibeStream.

## Research Methods

We used two research methods to collect data: interviews and surveys. Interviews provide better feedback in terms of the depth of the information received. Interviews are effective since the interviewer can encourage the interviewee to share more information based on personal thoughts and experiences. However, it is more difficult to get more interviewees as this is a more time-consuming process. Surveys, on the other hand, allow for greater outreach and feedback from a larger data set. These allow for more quantitative, measurable data that is less personable but more informational. Surveys, however, are less flexible because there are a certain set of responses that can be received.

We interviewed 4 people and asked each of them the following:

- 1) What does social media mean to you and how does it affect your everyday life?
- 2) On a profile page, what information would you find most interesting to see about another user?
- 3) What does music mean to you and if any, what impact does it have?
- 4) What do you dislike about current social media apps?
- 5) Do you feel passionate about your music taste and would you want to share it if you had the platform?
- 6) Do you feel that current social media/music apps help you connect with others based on your music tastes?
- 7) If you could design a music sharing app, what three features would you incorporate? (Show VibeStream low-fidelity and explain the idea behind it)
- 8) What possible user difficulties do you fear may exist in a music based social media app like ours?
- 9) How comfortable would you feel sharing your listening activity with others?
- 10) How would you describe the ideal vibe of a music-based social app?

We intentionally started with more general questions at first so we could gauge who our interviewee was and their personal thoughts. We did not introduce our app until after we received feedback from Question 7. This was so that we could minimize any bias in how our interviewees answered the questions. We intended to make the interview as beneficial as possible without the interviewee thinking about our app before we knew about their needs in terms of music. Once we introduced our app, the interviewee was able to give better feedback for our app specifically since they were already thinking about their own ideal app.

We sent our survey to 20 people and asked them to answer the following:

- 1) Age Group?
- 2) What music platform do you use?
- 3) How often do you listen to music in a day?
- 4) How often do you share music with friends?
- 5) How often do you collaborate with friends to make a playlist?
- 6) Do you always listen to the same type of music?
- 7) Do you view your Spotify wrapped Apple music replay (or equivalent) every year?
- 8) Do you wish you knew more people with similar music taste?
- 9) How do you discover new music?
- 10) What would you want to help you discover new music?
- 11) What do you find difficult in discovering new music?
- 12) How important is social media to you?
- 13) How important is growing your social media presence?
- 14) How passionate/proud of your music taste are you?
- 15) How important is growing a following based on your musical preferences?

These questions allowed us to get a feel about our audience's demographic, connection to music, and social media. These questions allowed us to know who exactly to cater our app to, and how integrated with social media we would want to make our app.

From the interviews and questions, we were able to gain a lot of feedback on what would be good and not for our app. This was very beneficial to us because both methods provided information that just one wouldn't have. The survey set the precedent for who our app should be targeted to, and the interview provided a basis for what a user would actually want to see in our app.

## **Participant Description**

### **Interviews:**

Details for 4 individuals

#### **P1 (Female, Age 27)**

P1 is a 27-year-old female who works in a catering company. She listens to music as a background activity during work and prefers genres like jazz and soft pop. She enjoys sharing playlists but is selective about her social media presence, as she values privacy. For P1, music is a personal experience, though she appreciates connecting with others with similar tastes. She is interested in features that allow her to discover music in a quiet, personalized way without the pressure of public engagement.

### **P2 (Female, Age 25)**

P2 is a 25-year-old female, working as a supplier quality manager. Her music taste is broad, spanning pop, R&B, J-pop, and K-pop. She actively shares music recommendations and engages with her friends about trending songs and artists. For her, music is a social activity, and she is looking for new ways to integrate her musical preferences into her content. P2 is interested in the social potential of music-based apps that could enhance her engagement. She also wants a feature that allows her to easily share the music she's listening to.

### **P3 (Male, Age 20)**

P3 is a 20-year-old male who is a Software Engineering student. He listens to a mix of alternative rock, indie, and electronic music while working/studying, often using music as a tool for inspiration. While not very active on social media, he enjoys sharing his favorite tracks with close friends or posting music occasionally on niche forums. For P3, music is a way to enhance his creative process and express his personal taste. He is interested in discovering new artists and genres but prefers a platform that focuses more on curating music for individual tastes rather than on social interactions.

### **P4 (Male, Age 23)**

P4 is a 23-year-old male who is a recent college graduate, working as a software developer. His music taste is eclectic, ranging from classical and instrumental to electronic and ambient music. He often listens to music during his coding sessions to help him focus. While he isn't very active on social media, he enjoys discussing music with a small group of friends. For P4, music serves as a background tool for concentration and relaxation. He would enjoy a social media aspect to music apps, where he could easily connect with others, share recommendations, and discover new music through social interactions, without it being too spread across on multiple platforms.

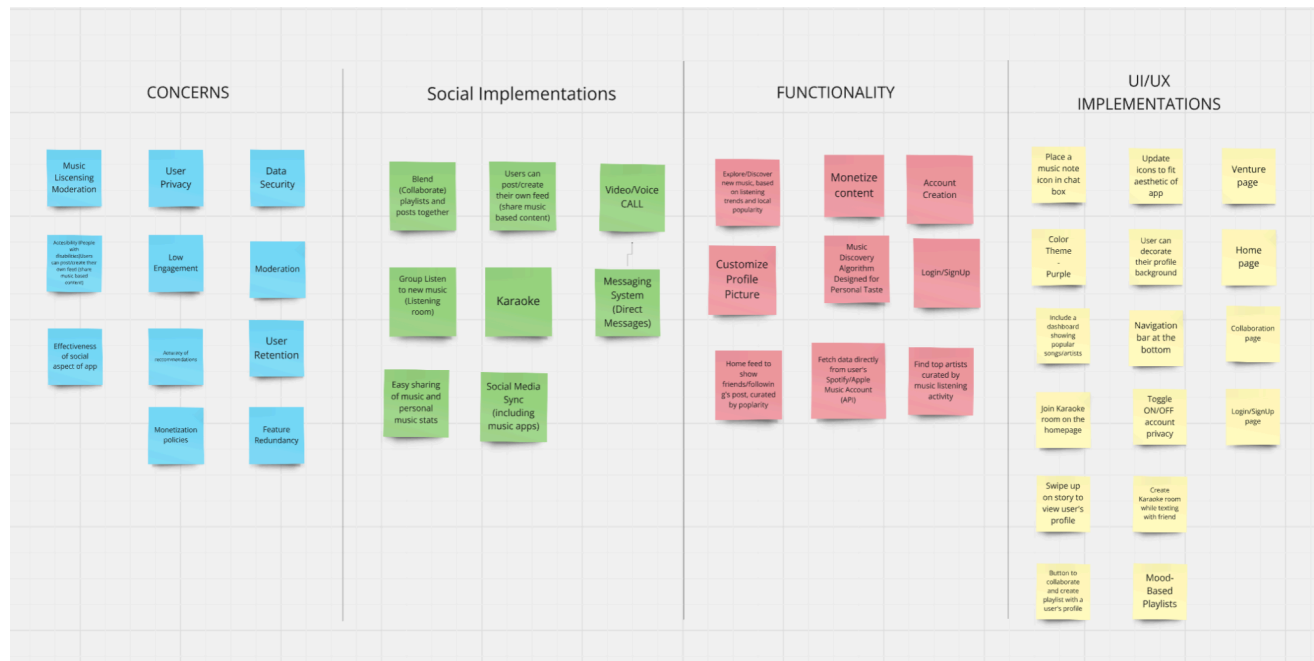
### **Questionnaire/Surveys:**

Aggregate demographics for our survey were as follows:

- Individuals mostly aged 20-29.
- Individuals who mostly use Spotify or Apple Music as their platform.
- Individuals who mostly listen to music 30 min - 2 hours a day, some up to 4 hours a day.
- Individuals who usually share music with friends at least a few times a month.

- Individuals who mostly view their Spotify Wrapped and Apple Music Replay every year.
- Individuals who, overall, would appreciate an app to share, connect, and grow a following based on music.

## Affinity Diagram



## Results Summary

The analysis of interviews, surveys, and the affinity diagram highlighted four central themes that have shaped the design and development priorities for VibeStream:

### 1. Concerns

- Theme Overview: Users have expressed concerns about data security, privacy, and effective moderation, which are crucial for trust and long-term engagement.
- Key Concerns:
  - Data Security & User Privacy: Ensuring user data is protected and user privacy is maintained.
  - Moderation: Effective moderation to maintain a safe and welcoming environment.
  - Low Engagement: Addressing potential issues related to user retention and interaction.
  - Accessibility: Ensuring the platform is usable by individuals with disabilities.

- Implication: Implement robust privacy measures, clear data policies, and comprehensive moderation tools. Ensure the app has accessibility features for inclusivity. To accommodate users who want more control, include a toggle option for account privacy settings.

## **2. Social Implementations**

- Theme Overview: Users desire meaningful social interactions through collaborative and engaging social features
- Key Features:
  - Collaborative Playlists & Group Listening (Blend/Listening Rooms): Allow users to experience music together in real-time.
  - Messaging System: Enable direct interaction and easy music sharing.
  - Karaoke & Voice/Video Call: Enhance social engagement with fun, collaborative activities.
- Implication: Develop social features such as collaborative playlists (Blends), direct messaging, group listening sessions, and karaoke rooms. These implementations will facilitate interaction, foster community, and make music sharing seamless and engaging.

## **3. Functionality**

- Theme Overview: Core app functionalities need to prioritize user needs and provide seamless music discovery and customization. Accurate and engaging music discovery is essential for keeping users engaged.
- Key Functional Features:
  - Music Discovery Algorithm: Tailored to user preferences for exploring new tracks and local hits.
  - Profile Customization: Allow users to personalize their accounts, including profile pictures and top music stats.
  - Integration with Existing Music Platforms: Fetch user data from popular platforms like Spotify or Apple Music.
- Implication: Focus on implementing a powerful music discovery algorithm and customizable user profiles that reflect individual music tastes and activity.

## **4. UI/UX Implementations**

- Theme Overview: The app's design should be intuitive, aesthetically pleasing, and accessible to all users, including those with disabilities.
- Key UI/UX Elements:
  - Aesthetic Cohesion: Incorporate a consistent color scheme (e.g., purple) and themed icons.
  - Navigation & User Experience: Simplified navigation with essential features like a bottom navigation bar and a dashboard showcasing popular content.
  - Interactive Elements: Place music-sharing icons in key areas like the chat box for quick sharing.

- Implication: Design an intuitive and visually aesthetically pleasing UI that enhances user interaction, featuring aesthetic customizations like profile backgrounds and mood-based playlists.

**Design Requirements:** Clearly list requirements with connections to the Data. Remember design requirements are a set of guidelines that outline the necessary functionalities, capabilities, and characteristics of a product to ensure that it meets the needs of the users and the objectives of the business. They form a roadmap that guides the design and development process, ensuring that the end-product is user-friendly, accessible, and valuable.

The key design requirements/features we need, based on the data collected, can be summarized as follows:

### 1. **Personalized User Profiles:**

**Requirement:** Allow users to create and customize their profiles to reflect their music preferences and social interactions, as well as fetch and display their music based statistics such as top artists, genres, songs, etc.

**Connection to Data:** From the interviews and survey, users wanted to show their music-based profile. P1, for instance, values privacy but still appreciates connecting with others who share similar music tastes, while P2 and P3 want to share music with close friends or smaller groups. Users also want to see meaningful information on others' profiles, such as favorite artists, recently played tracks, or genres.

**Implementation:** Include profiles for users to display their top tracks, favorite genres, playlists, artists, and enable them to create their music-based feed on what they choose to share.

### 2. **Music Discovery/Recommendations:**

**Requirement:** Provide users with personalized music recommendations based on their listening history, genres, and the preferences of their friends/following. Curate an Explore Page for them to discover local top artists and songs.

**Connection to Data:** The survey showed that many users struggle with discovering new music (question 11), and they desire assistance in finding tracks outside their usual genres (question 10). P3 and P4 also mentioned an interest in discovering new music in a way that is low-pressure and curated.

Implementation: Implement a Home feed that shows posts from users' social circles. Implement an Explore page that enables users to explore new music and artists based on local artist/song popularity, listening habits and popular creators.

### 3. **Messaging System:**

Requirement: Provide users a messaging system to interact with other users on the app. This feature allows for communication allowing an exchange of things such as music recommendations, messages or even other users' profiles.

Connection to Data: In the Interview, P4 said he would like an app that had a social media aspect to it where he can easily connect with others and share recommendations.

Implementation: The messaging system allows users to send direct messages or even a group chat with friends or followers. You can share links of other playlists, songs, artists or even profiles via direct messages.

### 4. **Sharing Music**

Requirement:

Enable users to share songs seamlessly while chatting with friends or even while simply listening to music.

Connection to Data:

In the interview, P2 expressed a desire for a feature that allows her to easily share the music.

Implementation:

- The homepage will display songs that friends are currently listening to, allowing users to discover and connect over shared music interests.
- In the messaging interface, when a user clicks on a friend's profile icon, they will see the song that the friend is currently listening to.
- Additionally, to make sharing songs effortless, a music note icon will appear next to the send button in chats. By clicking this icon, users can access a music search page. After finding a song, they can select it to instantly share with the friend they're texting.

## **Conclusion**

Main findings can be summarized briefly as follows:

- Participants are eager about a social media aspect to music apps.
- Participants mostly listen to Spotify and Apple Music, and are familiar with the 'Wrapped/Replay' features of these apps.

- Participants want an easy way to share music and grow a music-based following.
- Participants want a way to find other people with similar music-based interests.
- Participants suggest the following features:
  - Karaoke
  - Rate/Review new music
  - Group Listen to new music (Listening room)
  - Possible monetization of content
- Participants have possible doubts about the following:
  - Protection of privacy
  - Moderation
  - Judgment/Low engagement

Implications of these findings are:

- We have an interesting app idea that music-listeners want/need.
- Our existing features of music posting, exploring new music, sharing, blends, following/friends, and stories fit into our demographic's wants.
- We will implement additional features like karaoke, listening room. rate/reviews and monetization to our low-fidelity design.
- We will implement guidelines to explain our privacy structure and moderation.

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CHARM Choosing Human-Computer Interaction (HCI) Appropriate Research Methods

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