Chaeyoon Song Amir Alkadir Mayukhi Khan Tsion Bekele Kaaviya Senthil

#### GP1

# Introduction

Imagine this. You are on your daily commute, earbuds in, lost in your favorite playlist. The beat drops, and you cannot help but think, "My best friend would love this track!" However, there is no easy way to share that moment. Sure, you could share and text it, but it feels clunky and disconnected. Sound familiar? Music streaming has become as essential to our daily routines as that first cup of coffee, but something is missing. Spotify and Apple Music have given us libraries of millions of songs at our fingertips, but they are dancing alone to their tune. Meanwhile, over on Instagram, we are sharing every aspect of our lives except our musical journeys. That is where our idea comes in. Share your favorite songs easily and find a new artist through your friend's recommendations. In a world where we are constantly connected, but often feel alone, we believe music has the power to bring us together in meaningful ways. By seamlessly combining entertainment and connectivity, we aim to reimagine the way people experience and share music in their daily lives.

# Identifying the problem space, existing systems and stakeholder group

In the US, music streaming apps generated \$47.7 billion revenue in 2023, a 10.1% increase on the year prior. Spotify is the most popular music streaming platform in the world, with over 350 million users and 150 million subscribers, followed closely by Apple Music (Music Streaming App Revenue and Usage Statistics (2024)). Revenue from music streaming has increased every year since 2014 at an average rate of 43.9% (Music Streaming - Worldwide | Statista Market Forecast). These streaming apps are clearly in growing demand, with a huge and consistent user base that invests in music.

This market, however, is solely monopolized by apps that are individual-focused and completely lacking a social or connective aspect. If hundreds of millions of individuals use these music apps daily, there must exist a need to also share, socialize and connect based on these apps' usages. Our problem space is the gap in the market for social-media features (including feed curation, following/connecting, easy sharing, collaboration, stories/updates, sense of community, etc) in music streaming apps. The problem space can be briefly defined as an opportunity for an app that combines the key features of social media apps and music services, thereby adding a connective, entertaining and social aspect to everyday music-listening.

Existing systems for this general interest/idea are described below:

1. *Spotify App*: Spotify describes itself as "a digital music, podcast, and video service that gives you access to millions of songs and other content from creators all over the world" (Spotify.com – What-is-Spotify). Basic functions such as playing music are totally free, but users can also choose to upgrade to Spotify Premium, which gives them ad-free uninterrupted listening, better features such as selecting and adding songs to playlists, accessing podcasts and more. As of June 2024, it is one of the largest providers of music streaming services, with over 626 million monthly active users comprising 246 million paying subscribers. (Wikipedia – Spotify).

Despite its popularity, it lacks any features for connecting or engaging with other users, except a "blend" option that combines two users' song choices in a combined playlist. This option does not allow customization for the users to select specific songs or combine more than 2 listeners.

2. *Apple Music*: Apple Music says it's "an ad-free streaming music service that lets you play millions of songs and your music library" (Apple.com – apple-music). It is a paid, subscription-based service that gives access to songs, streaming and live radio. Apple Music has over 93 million subscribers in 2024, an increase of 5.68% from the past year (Apple Music Users & Revenue Statistics 2024 - DemandSage)

Like Spotify, it also does not provide social engagement. One of its features includes Family Sharing to share an Apple Music subscription with up to five other family members, but does not allow any connection or sharing between members.

3. *YouTube Music*: YouTube Music is a music streaming service developed by the American video platform YouTube, a subsidiary of Google. The service is "designed with a user interface that allows users to explore songs and music videos on YouTube based on genres, playlists, and recommendations" (YouTube Music - Wikipedia). As of the end of 2023, YouTube Music had around 80 million paid subscribers, a 5% increase from the past year.

Despite being a subsidiary of the very popular social media app YouTube, it does not share its social media features. It is an individual-only streaming service like its competitors.

4. *Instagram*: Instagram is a free, online photo-sharing application and social network platform that was acquired by Facebook in 2012. Instagram allows users to edit and upload photos and short videos through a mobile app, and interact with others' content through likes, comments, sharing, stories and direct messages. (What is Instagram? | Definition from TechTarget). It is a very successful social media platform due to its fun and visual features that focus on connection and interaction.

Instagram, however, is a general and broad platform that does not have a specific focus on music. An untapped market would be an Instagram-like app with a music-based interface.

Our chosen *stakeholder group* consists of individuals who already use different music streaming services, who would also be interested in connection, creation, interaction and community-building based on their music listening trends and interests. These users include the following types of individuals:

- 1. Young people who use music streaming apps,
- 2. People looking to connect based on music taste,
- 3. People looking to share and gain a following based on their music curations,
- 4. Young people in specific music-based subcultures (goth/metal, etc) looking to find a community with common interests,
- 5. Fandoms of bands and celebrities looking to connect with fellow fans
- 6. People who want to add their podcasts with hopes of reaching a new audience.
- 7. Event organizers and promoters who want to advertise their concerts or music based on user interactions using our "For you" algorithm.

#### **Problems Stakeholders Face**

Stakeholder groups will include:

- Young people who use music streaming apps, people looking to connect based on music taste
- People looking to share and gain a following based on their music curations
- Young people in specific music-based subcultures (goth/metal, etc) looking to find a community with common interests
- Fandoms of bands and celebrities looking to connect with fellow fans

People seeking meaningful social interactions around music often find current platforms lacking features that go beyond passive listening. Although users can exchange songs or playlists via third-party messaging apps, the music streaming platform itself does not offer a seamless interface that enables in-the-moment sharing, group playlist creation, or discussions. Engagement is significantly limited by the lack of a dynamic, in-app social feed where users may share what they are listening to or find new music through friends. Additionally, without community-driven spaces, users who want to connect over certain genres or artists have no central hub to find others with similar tastes. This isolation can make music discovery feel like an individual activity rather than a communal experience.

Another issue music enthusiasts who want to curate playlists and influence others face is the difficulty in showcasing their music taste to a broader audience. Although streaming services offer enormous music libraries, users have limited options for presenting their curation in an engaging and easily discoverable way. Creating playlists is typically an

individual activity with no options of actively sharing playlists or music recommendations to potential followers. Furthermore, current algorithms favor well-established artists or playlists, burying user-generated content and making it harder for curators to gain visibility. Users that like sharing music find it difficult to grow a following without the right discoverability tools--including personalized suggestions for playlists or profiles--which lowers their motivation to engage with the platform.

People looking to connect based on music taste may face difficulty finding suitable matches if the app lacks efficient algorithms or features that match users with similar music preferences. Along with that, if there is a lack of engagement from users, individuals may feel discouraged to continue using the app. Further, if the app's matching or recommendation system is not fully developed with end-to-end accuracy, users may be matched with others whose musical preferences are loosely aligned to their own. This inconsistent matching may reduce user interest in engaging with the social aspect of the app.

A subgroup looking to gain followers based on their musical preferences and recommendations may face difficulty if the app does not have an effective discovery platform. This includes promotion of only mainstream content or other obstacles that may obstruct a profile from being advertised. Following the problems attested to people looking to connect based on music taste, if there is low engagement on the app itself, users may have difficulty building a following. If there is a lack of desired features or for other reasons explained, users will not want to use the app, users cannot gain matches, and the purpose of the app will be diminished. Further, if there is no additional method for music curators to build their platform or motivation to continue building upon their following, they will be less likely to use this application.

The key issues among these stakeholder groups include ineffective algorithms for matching users, low user engagement, and insufficient tools for community and fan engagement. Addressing these points will be essential for creating an app that appeals to a broad range of users, encouraging meaningful connections, and fostering sustained participation.

# **Proposed Data Gathering Techniques**

- Interviews
- Focus groups
- Surveys

Interviews are a great way to explore issues and encourage contact between developers and users. Because our application heavily depends upon user interaction and engagement, it is crucial that developers know exactly what users want prior to development. Further, interviews allow flexibility in the conversation and can allow more useful insight catered to what developers need for accurate and efficient creation. In our case, a

semi-structured interview may prove to be the most beneficial because these interviews consist of key questions that can provide guidance, but allow for the "interviewer or interviewee to diverge in order to pursue an idea or response in more detail." (Gill, Stewart, Treasure, Chadwick)

Focus groups are groups that discuss a topic for research. This method of data gathering is useful in "generating a rich understanding of participants' experiences and beliefs." (Gill, Stewart, Treasure, Chadwick) This allows for a broader view of user opinions and reveals areas of consensus for the application. Further, it can also show ideas that users are typically against. Group dynamics encourage ideas to grow upon each other, which can allow for new perspectives and real-time feedback.

Implementing a third data gathering technique gives our data analyst team a broader range of data gathering. Surveys provide developers accurate data that make it simple for the respondents to provide feedback. To reduce the amount of inaccurate surveys we receive, we will implement a variety of thought-provoking multiple choice and open-ended prompts that can help with engaging respondents. We will limit the length of the survey to keep respondents interested and ensure we get engaged responses to our surveys.

## **Conclusion**

Music is more than just background noise. It is the soundtrack to our lives and the melody that brings people together. Yet, in the digital age, much of the social element of music has been lost. Our application bridges this gap by combining streaming and social interaction, creating new ways to experience music. With features like playlist sharing, Instagram-style stories, and personalized profiles, we empower users to express their musical identities and connect meaningfully with others. By reintroducing social elements into streaming, we equip music enthusiasts with tools to influence each other, share experiences, and build vibrant communities. Our solution addressed real challenges users face in existing music applications, transforming passive listening into an interactive and engaging experience. Ultimately, our application aims to make every listening moment more meaningful, rewarding, and fun.

## **Sources**

- 1. https://www.businessofapps.com/data/music-streaming-market/
- 2. <a href="https://www.statista.com/outlook/amo/media/music-radio-podcasts/digital-music/music-streaming/worldwide#:~:text=Revenue%20in%20the%20Music%20Streaming,US%2413%2C190.00m%20in%202024">https://www.statista.com/outlook/amo/media/music-radio-podcasts/digital-music/music-streaming/worldwide#:~:text=Revenue%20in%20the%20Music%20Streaming,US%2413%2C190.00m%20in%202024</a>).
- 3. <a href="https://support.spotify.com/us/article/what-is-spotify/">https://support.spotify.com/us/article/what-is-spotify/</a>
- 4. <a href="https://en.wikipedia.org/wiki/Spotify">https://en.wikipedia.org/wiki/Spotify</a>
- 5. https://www.apple.com/apple-music/
- 6. <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%202024%2C">https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%202024%2C</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%202024%2C</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%202024%2C</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%202024%2C</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%202024%2C</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%202024%2C</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%202024%2C</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%20of%20revenue">https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%20revenue</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%20revenue">https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%20revenue</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%20revenue">https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%20revenue</a> <a href="https://www.demandsage.com/apple-music-statistics/#:~:text=As%20of%20revenue</a> <a href="https:/
- 7. <a href="https://en.wikipedia.org/wiki/YouTube Music">https://en.wikipedia.org/wiki/YouTube Music</a>
- 8. <a href="https://www.techtarget.com/searchcio/definition/Instagram#">https://www.techtarget.com/searchcio/definition/Instagram#</a>
- 9. <a href="https://www.nature.com/articles/bdj.2008.192">https://www.nature.com/articles/bdj.2008.192</a>