**Product Vision**

*Elevator pitch*: Our vision is to create a revolutionary music discovery platform that blends technology with user preferences, providing a personalized experience for music enthusiasts. By analyzing song metadata and genres, our application allows users to discover, curate, and share songs tailored to their individual tastes and interests. Our platform guarantees the right song for every occasion, regardless of whether you are a casual listener, fitness enthusiast, or song writer. With a focus on diversity, accessibility, and personalization, our product aims to not only match songs but foster a global community of people who love music.

**List of high-level user stories**

1. (Match songs with similar metadata) As a playlist creator, I want to build a diverse playlist similar to a certain song.
2. (Crafting a party playlist) As a DJ, I want to create a playlist of songs with similar bpm that will cater to the people at the party
3. (Return songs based on occasion) As an event planner, I want to find background music that suits the atmosphere of my event.
4. (Find songs based on tempo) As a fitness class instructor, I want to find songs that have specific beats for different parts of my workout routine.
5. (Find Existing Mixes) As a casual online video watcher, I want to see if I can find mashups of my favorite songs by searching two similar songs together.
6. (Manual Key and BPM Inputs) As a youtuber I want to be able to make music mixes between popular songs and my original songs.
7. (Match and Return Key of Similar Songs) As a singer, I want to find songs similar to songs I have sung before to practice within the same key.
8. (Match and Return key and BPM of similar songs)As a music enthusiast, I want to see other songs that sound similar to the ones that I like so I can learn about more songs.
9. (Find songs with the same Key)As a songwriter, I want to find other songs that have the same key as the one I am creating, for inspiration.
10. (Find tracks with high BPM)As a gym goer, I want to find upbeat tracks with high BPM to create an energizing workout playlist
11. (Find Songs With Similar Keys)As a podcast producer, I want to find ambient music with similar keys that complement the mood of the podcast.
12. (Find songs with Similar Keys) As a radio curator, I want to find music that is very similar in key so that they can go on a radio channel.
13. (Create playlist and send to Spotify) As a spotify user, I want to create a spotify playlist automatically with a similar vibe
14. (Find songs from a Geographic Area) As a government employee, I want to be able to find songs that are from or talk about a geographic area (country, state) as I want to create patriotic songs for that geographic area
15. (Add songs to database) As a moderator, I want to be able to add indie songs to the database so others can look them up later and see if any songs have similar metadata to them
16. (Cover art finder) As a cover art fan, I want to find cover art of songs and see if they fit my intended bpm and key

17. (Find songs with similar BPM and Key) As a limo driver, I want to provide my riders with a great experience, per their requested music "vibe," so that I can get more tips.
18. (Find songs with similar BPM and Key) As a school teacher, I want to provide my students with calm, soothing music (of a similar genre) so that they can focus.
19. (Find songs with similar BPM and Key) As a Tik-Tok star, I want to create similar videos, with similar songs so that I can create a consistent content base.
20. (Manual Key and BPM Inputs) As a music student at Virginia Tech, I want to have access to similar music "topics" with a specific key so that I can learn from these artists and build my own music.
21. (Find songs with similar BPM and Key) As a music producer, I want to analyze which songs have resonated well with listeners and build better music.
22. (Find songs with similar BPM and Key)As a Spotify developer, I want to improve our Discover Weekly to curate better song suggestions for our users.
23. (Tagging System of Resulting Recs) As a typical user I want to be able to filter the resulting songs by mood, BPM, or key.

**Product Roadmap**

| Side | 1st Sprint | 2nd Sprint | 3rd Sprint | 4th Sprint |
|---|---|---|---|---|
| Front End | Basic and accessible web page with single search bar on homepage for song and artist | Login page and user information | A more user friendly design with customization options | Social media integration ie link account with spotify |
| Back End | Take a query of song name, and give similar songs with the same key. | Takes a query of a song name, and give songs with the same bpm | Manually add songs with their title, bpm and key | Sends playlist to spotify<br><br>Geography origin for songs should be searchable (sort by tags/available metadata) |

Each user story has been imported into gitlab as an Issue, which we will then use to sort into our future Milestones in git for sprints as needed according to our Product Roadmap. Similar Issues may be grouped together under one Issue and expounded on in more detail as we begin to develop our backend. Since the backend is the highest risk, we want to make sure that the basic searching queries work as intended by the first sprint.

https://code.vt.edu/mash-ups/mash-ups