

Jammin Requirements Document

Functional Requirements

1. **Create a user profile:** The user must be able to create a new profile for themselves by providing a unique email that does not exist in our database, and a password as well. This profile will also require information such as the user's name, gender and age which will be displayed to users they match with.
2. **Log in to the system:** A user with an active account must be able to input the email and password they signed up with and log into our system, granting access to the rest of the web app.
3. **Authorize use of Spotify information:** After logging into their personal profile, a user must be prompted to authorize the web app to use their spotify information by logging into their account. This authorization will also be remembered for future login attempts through a browser's cookies, allowing the already authenticated user to skip this step.
4. **Access and edit your profile:** While logged in a user will be able to access a view of their profile that enables them to edit fields such as their name, password, etc. These changes will be stored in the database upon a user's confirmation of the changes.
5. **Explore potential matches based on the LLMs recommendations:** While logged in, a user will be able to use the web app's connection with ChatGPT to suggest other users of similar music taste to potentially match with them.
6. **Send "likes" to other users:** While viewing other users based on the LLM's recommendations, a user will be able to "like" the profile to potentially match with that user.
7. **View users you have matched with:** If two users like each other's profiles, they will be matched, and will be granted access to view a more in depth version of the profile of the user they matched with.
8. **Navigate through pages using a navigation bar:** Users will see a navigation bar on pages after they have logged in that allows them to click an icon that will take them to the respective page.
9. **View an about page for information about the program:** Users will have access to an about page that will outline the purpose, functionality and credits for the program.
10. **Log out of the system:** All users will have access to a logout button that logs them out of the system and returns them to the landing page.

Non-Functional Requirements

1. **Usable and Spotify reminiscent UI:** The UI provided to the user should be simplistic and easy to use, while feeling familiar to the Spotify UI. This would be most present in the matching portion of the program, with users showing up in a very similar fashion to songs on Spotify, while using skip / replay buttons to navigate them, and a large heart button similar to Spotify's play / pause button.

2. **Profile Customization:** Users will have the ability to express themselves by customizing parts of their profile with things such as answers to icebreaker questions and a biography describing themselves to other users. This custom info will also only be available for users to see once matched with someone.
3. **Performance:** All match generation and score calculation completed by the LLM should finish and be displayed to the user within 10 seconds. The user should then have immediate control and be able to match with the displayed users.
4. **Security:** Passwords must be securely stored in the database using hashing. Also, no plaintext passwords should be accessible or visible in the database.
5. **Scalability:** While having 25 concurrent users in the database, the maximum for an unregistered spotify application, there should be no significant performance drop.

USE CASES/USER STORIES:

As a <type of user> i want to <goal> so that <reason>

As a user logged-in with spotify I want to be able to see other users that share the same music taste as me and “match” with them so that I can discover new music and meet new people.

As a new user, I want to be able to easily create an account using an email and password to be able to access the service.

As a logged in user I want to be able to edit the information stored on my account so that if I have made a mistake when entering the info there is a way to remedy the situation.

As a user I want to complete a proper authorization of my spotify account to ensure the security of the information being used by this service.