

on “add song” in that specific song. If the user wants to delete a song, they will have to go into their music list(s), choose a song they want to remove, click “remove” on that song.

#### **4) Making an appointment for reminder of the new release song**

To set a notification for an artist new release, the user must be logged into an account or will have to sign up first. Afterwards, they can find the artist and right click on the options and or click on a bell notification symbol next to the profile.

## **Non-functional Requirements**

The Graphical User Interface or GUI will be similar to many online streaming services such as Tidal or Spotify’s interface. Although, we want to make some drastic changes in sections in order to increase user-friendliness and also make room for our own extra features. For example, our notification functionality would be more pronounced for the user to set reminder and those should pop up on a news feed page once the song or album is released. We want to ensure that what makes us unique in the music streaming industry is further promoted in our application interface.

In terms of design, we want to make sure that we thoroughly test out our changed website via A/B Testing. This test will allow us to make minor changes, let’s say against Spotify and then we would be able to track user metrics on whether or not we improved user intuitiveness against their design. We hope that every change we do would provide a slightly better result in human computer interactivity and hopefully the sum of all those changes would make us stand out against competitors. Also, we hope not to overload the user with a bunch of information so we will take notes on human interaction theories such as only having a max of 9 options in a grouping based on people’s ability to handle 7 options at once, give or take 2 based on the user’s cognitive function and attention span. That theory for example is called “The magical number seven, plus or minus two”.

Security will be tight regarding access to the music database and user information. We do not want everybody to be able to directly download artists' intellectual property as well as them having access to our private user information. User passwords will be salted and hashed in order to reduce the chances of a password hit. Also, after five failed login attempts the user will have to recover their account via stored email as we need to do our best to prevent a brute force attack. The permissions we allow each user should not have much effect on our system until it gets up to an artist or administrative account, but we will still have checks and balances with other admins if an admin account wants to delete or modify any of the production code or site functionality.

Access Control in this system will be based on whether the user has an account or not. We will be able to set permissions on playlist creation, music download and such. A user without an account should only be able to listen to music, but should be unable to rate, ask for song notification and create a playlist. The next level up would be having an account and they would be able to create playlists, download music, and ask for song notifications. Beyond that would be artist accounts to allow our content creators to upload their music for fans to listen to. They would have all the permissions of a regular user, but can access some data metrics on their song views and payout per listen. At the top would be administrative accounts, which would be able to access anything with almost complete control, except there still would be a check and balance if an admin tries to delete an account or music. It should notify other admins and take a majority vote to implement that change.