

Mandatory

Sunday, November 6, 2022 9:04 AM

Music Streaming

- Content must be streamed from a location other than the local device (this could be a first-party server, another device or a third-party server)
 - Server on one pc (node.js + express + SQLite / mongoDB (atlas), serves files through http)
 - Transportation to Raspberry pi
- What is the advantage of the networking setup / why did you go with it?
 - Whether one server can handle all streaming. We are just doing a small project with music instead of video
 - A server for music streaming, another one for other data transformation? OR one pi would be enough.
- Bandwidth
 - If the bandwidth is not sufficient, it should automatically switch to a lower bit rate source
 - Make sure to test this using network throttling tools or even using real-world spotty connections

Social Interaction

- Create user account (Identity provider)
 - User name,
 - Email-address -> unique ID
 - Password should be invisible in our databank, security
 - User profile, let users choose what kind of music they prefer, helps for ML.
- Login
 - Email-address / user name
 - Password
 - Reset password
- Friends
 - Add friends by unique ID
 - Delete friends
 - View friends' profile (friends' My Music)
 - Block friends
- Live Chat / Direct messages
- Automatically detect and flag inappropriate content / harassment!
 - manually muting/blocking and reporting where it's appropriate!
 - Set a list of "bad words" and automatic detection -> enough? -> check with customers!

My music

- User name
- Profile picture
- Description
- Playlists (private, shared playlist with friends)

Content Recommendations

New releases	Show the last uploaded song to the server
Most heard from friends	Heard by 9 friends of yours, based on friends' playlists / listen history?
MusicFun Charts	Internal ranking of all Musicfun app users' playlists / listen history?
Songs you may like	ML based on users' search history, songs in playlists, songs they have heard (for more than 1min) , tags in profile.

Stop-watch to detect time song being played

Synchronized playback* (optional???)

- A group of multiple users should be able to watch/listen to the same content at the same time
ballpark: 10% of media length
 - A host sends out invitations to multiple users. This creates a temporary room / group. Users can be found by send out a msg to whatsapp or be added directly from friends list. If they are not registered users, create anonymous user.
 - Does "User accounts are not required for this" means: "anonymous collaboration is required"? -> no. Do registered and anonymous users have to be able to use our application (for the synchronized playback) or can we just work with user accounts?
 - Only private rooms first. Otherwise, it is broadcasting.
- Different users have different bandwidth
- Users should be able to see that someone is watching/listening along with them
 - Add-on: show a line in "album screen" called "there are x people in the room now"

Administrative access -> What can administrators do? Part of the app?

- Upload music
- Delete / block users
- Get reports from "automatic detection"
- Delete music