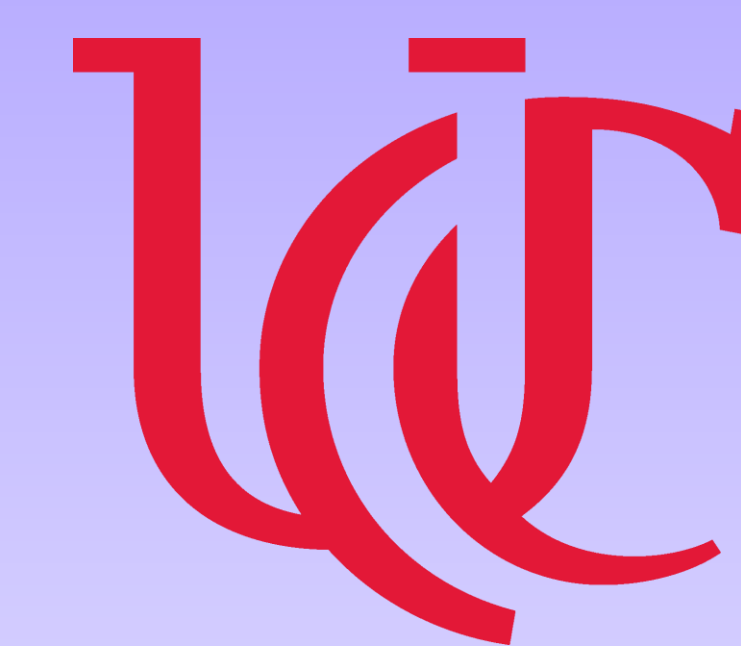




Trysten Giorgione
Computer Science

FAIR SPOTIFY JAM



Advisor: Fred Annexstein

PROBLEM

When listening to songs with a group in a Spotify Jam, the queued songs are played in a “first queued first played” fashion. This makes the queue unfair and makes it possible for users to be over/underrepresented in the Jam session.

SOLUTION

A webapp that improves Spotify’s group listening functionality by implementing fair queue management. Using the Spotify API, our solution aims to ensure all users in a shared session are equally represented in the song rotation. This approach will enhance user satisfaction and encourage a more enjoyable, balanced experience for group listening.

CHALLENGES

- Using Spotify API
- Finding work-arounds for when Spotify’s API wasn’t enough (ex. native Jam has no API support)
- Managing time on the project with the busyness of being a senior

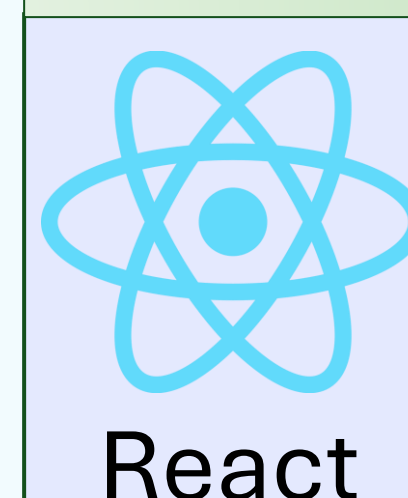
ACCOMPLISHMENTS

- Hosts can start a session and authenticate with Spotify
- Guests can join a session via session ID and add songs to queue
- The currently playing song and queues can be seen on host and guest dashboards
- The queue algorithm gives every user a fair chance to have a song played every rotation through users
- Hosts can save the songs that were played in a session as a playlist

USER STORIES

1. When in a Spotify Jam, I feel like other people queue many songs before I can even queue one.
2. After an enjoying night hanging out and listening to music with friends, I wish I could easily save a playlist of all the songs we listened to.

TECH USED



React

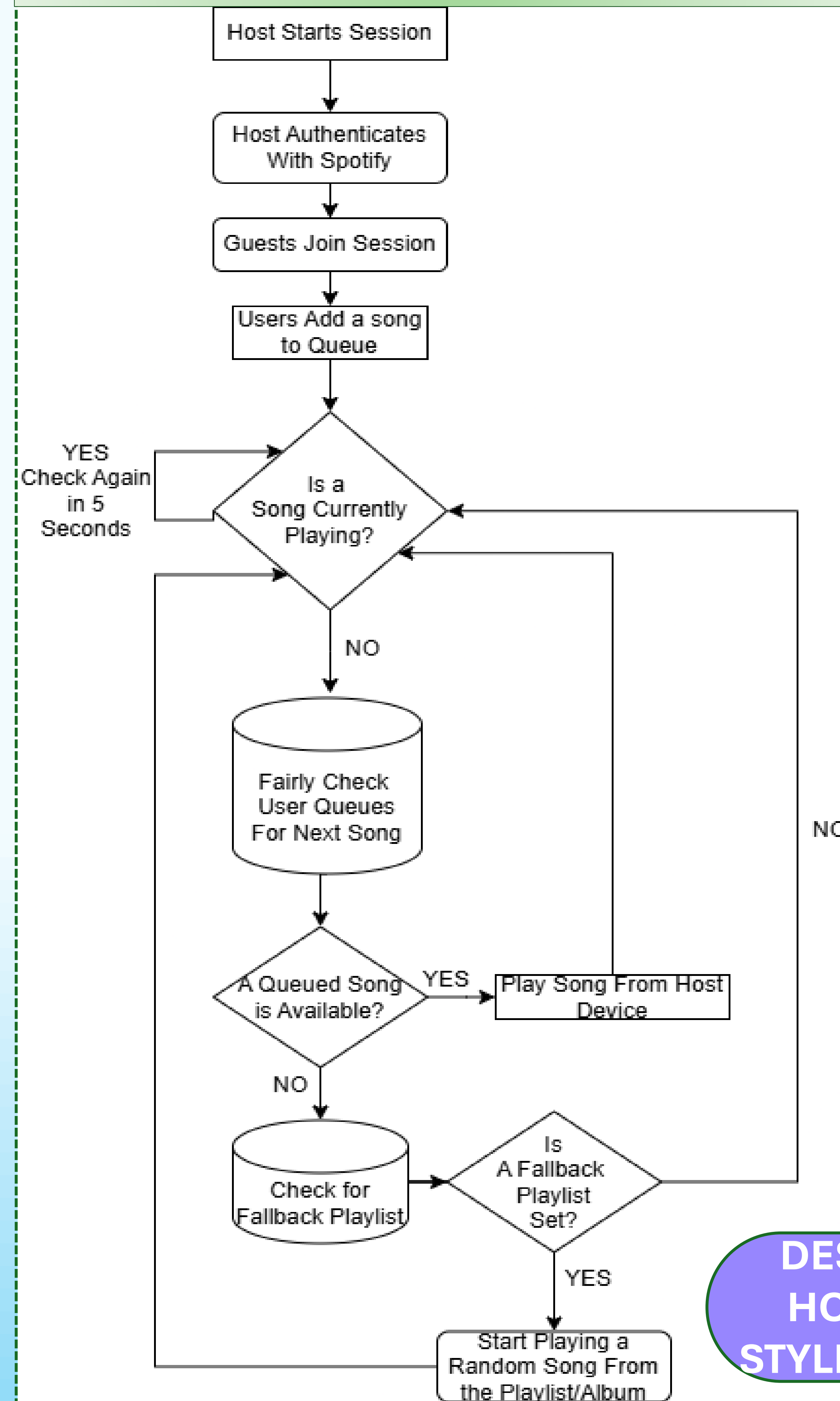


Spotify for Developers



Visual Studio Code

DESIGN FLOW CHART



DESIRED
HOST UI
STYLE DRAFT

Host Dashboard UI

Host Dashboard

Session ID: 1b4c503e-77f8-47a3-a978-d3ef8f1d4004

Guests in Session

- super_chicken355
- bob1

Now Playing

Spanish Castle Magic (Olympic Studios, London, UK, February 17, 1969) - Jimi Hendrix

Queue

super_chicken355

- Hey Joe - Jimi Hendrix
- Spanish Castle Magic (Olympic Studios, London, UK, February 17, 1969) - Jimi Hendrix

bob1

- Never Gonna Give You Up - Rick Astley

Add a Song to Queue

Set Fallback Playlist

Current Fallback: Off the Wall by Michael Jackson

Host Controls

FUTURE PLANS/GOALS

- Develop a smoother UI to increase QoE and QoS for users
- If Spotify ever allows for native Jams to be integrated with their API, session functionalities will become easier to manage, but the logic will need updated.
- More potential party/fun features (e.x. category game)

