Spotify Speed Dating

Nicholas Jefferis, Casey Schablein
Advisor: Yizong Cheng

Background

Music's cultural impact is undeniable. Our passion for music creates an insatiable hunger to always hunt for new songs or artists to add to our collection.

This project will create a new platform to facilitate this discovery using React to build an accessible web app. We will incorporate swiping from popular dating apps to allow users to quickly filter out enjoyable songs based on a short snippet and save them for future listening.

Objectives

- Reimagine Music Discovery
- Allow users to easily save new songs
- Propagate sharing of music and playlists
- Facilitate exposure of lesser known artists

Challenges

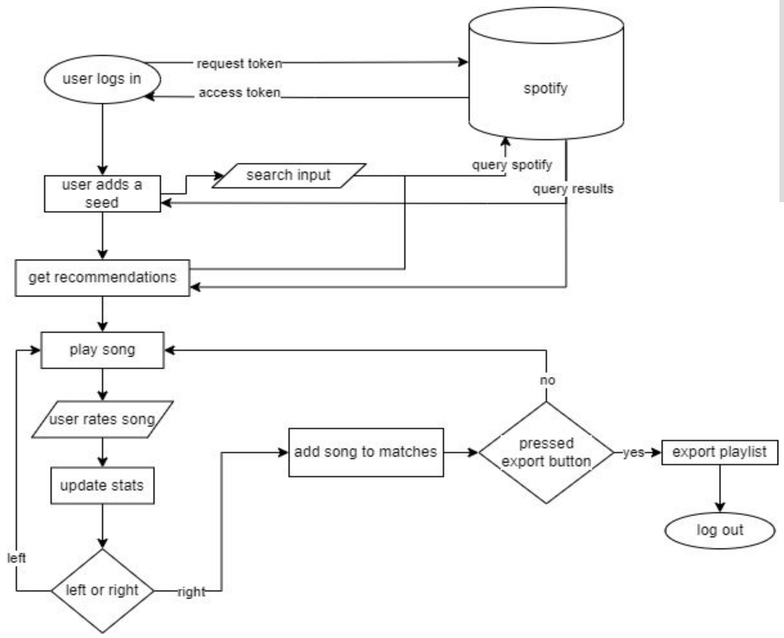
- Must adhere to Spotify Developer Policy and Design Guidelines to avoid improperly using music and other content
- Keep users' information safe when logging in to Spotify and using the application
- Limited experience developing web applications
- No experience with user authentication
- Limiting our scope and pacing ourselves

Technologies Used

React, Visual Studio Code, GitHub, Spotify for Developers, node.js

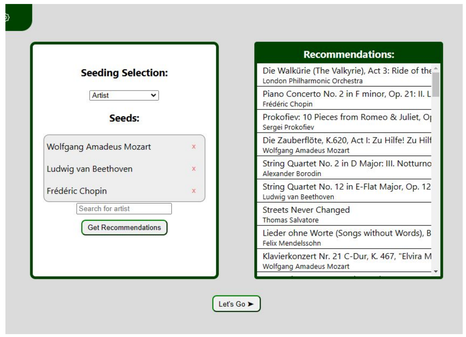
Our Design

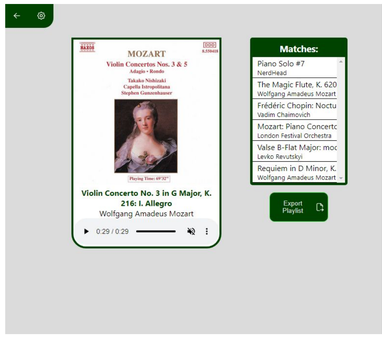
- Users log in through Spotify and generate authentication token
- Generate search seeds based on user input
- Retrieve recommendations from Spotify API
- Play song snippet and prompt users to swipe left or right
- Save liked songs and export to Spotify playlist



Accomplishments

- User Authentication: Users can login through Spotify and are provided an access token for the duration of the session
- Retrieving and Playing Audio Snippets: Use Spotify song data to find preview link and filter out songs without previews
- Seeding: User can choose to seed by their favorite songs or artists according to Spotify, or search for songs or artists individually to use as search seeds.
- Swiping: While previewing returned songs, users can swipe right or left to like or dislike a song, respectively.





Future Work

- Add analysis on songs/artists/genres recommended to and liked by the user
- Implement more unit and integration testing
- Utilize cookies to remember user preferences
- Generate links to playlists for sharing
- Enhanced settings filters for song popularity, energy, etc.

Contacts

NIcholas Jefferis
Computer Science, 2023
jefferns@mail.uc.edu

Casey Schablein
Computer Science, 2023
schablcw@mail.uc.edu