CS4530 Final Project: "Music Areas"
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Feature Overview

Covey.town is about to get even better with music–we're adding a new feature where you can enjoy Spotify right within the town. Whether you're powering through study sessions, catching up with buddies, or simply taking a moment for yourself, you now can do it to the sound of music. Simply go to a music area, kick off a session, and let everyone join in with synchronized playback. Feel like socializing? Keep your session open for all Covey.town users. Or, for a more personal touch, set up a private jam session with your close friends. It's a whole new way to connect and vibe together!
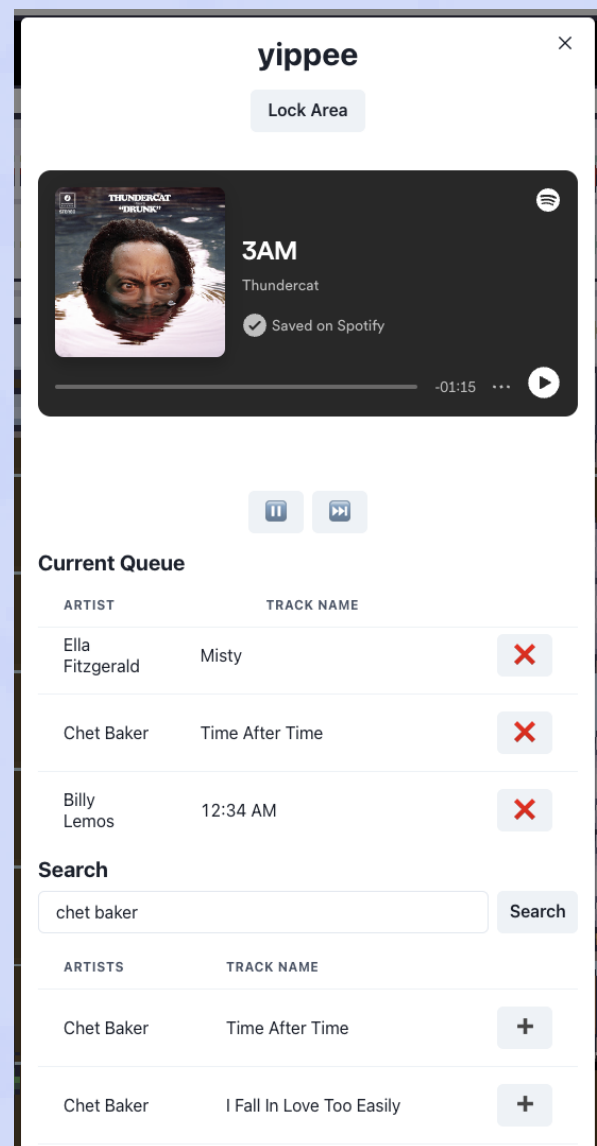
Music Areas in Covey.town are interactive map objects where users can start a session, indicated by a white display notification. While Covey.town currently supports YouTube videos in ViewingArea rooms, Music Areas enhance group listening by leveraging the Spotify API and Web Player SDK for a richer, more interactive experience.
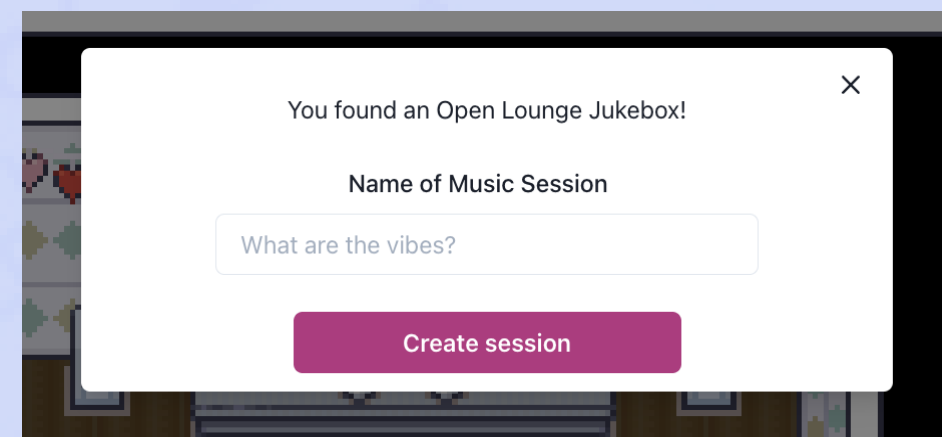

Music rooms are recognizable by their pink columns, hearts, and flowers decorations. (You may also see them as lone areas!)
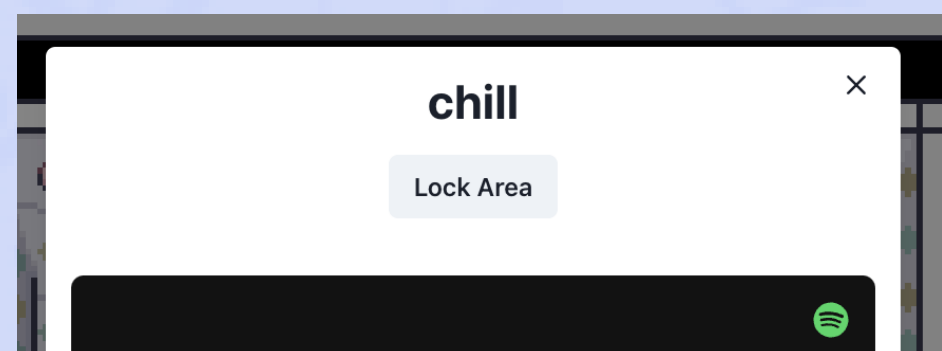
Demo and Source

⭐ Render Demo Deployment

⭐ Source Repository

When space bar is pressed, a modal pops up and prompts user to name and create a music session

Members of a private music session can control room privacy by locking and unlocking the area. When locked, users not in the session are teleported away.

Main player component for all members of a music session. Handles all controls including lock, search, play, pause, skip, and queue

Technology Stack & Design

- We integrated music areas into Covey.Town's codebase, represented as 'MusicArea' or 'PrivateMusicArea' objects in Tiled's tilemap. These areas, rendered by Phaser, dynamically construct when the map loads. Players entering an empty music area can create a session, inputting a name through a React/Chakra modal.
- In-session, a SpotifyPlayback view enables song playback control, including toggling, skipping, queuing, and searching.
- Music areas are managed by classes in the 'music' directory of townService, defining the structure and functions of Music Rooms, with extensions for private sessions. This directory also includes SpotifyUserPlayback and SpotifyController for managing Spotify API calls and music area state.
- Automated testing is conducted through Covey.Town CI on GitHub and NextJS build checks on Render, with the application's environment variables configured.

Next Steps

We can abstract our private session functionality to all interactable areas–comfortable room privacy could benefit any collaborative areas. Our feature also currently requires players to have Spotify Premium, but ideally should be accessible to anyone in the Town. Additionally, allowing users to request access to private rooms will be beneficial.