Covey Radio

CS4530 | Section 2 | Group 206

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01 Project Description

Covey.Town includes various ways to interact with the environment as well as with other players, such as games, conversation areas, and videos. However, a musical component is not present and could add to the appeal and intractability of the game so we decided to create a way to listen to different radio stations through a new Radio Area and do so with other players as well. This will allow users to share synced media across players. They will be able to listen to the same station and react to what they hear on the existing chat features real-time, creating a connection with other players. This could include music stations, live talk-shows, or sporting events, all aired over internet radio. They can also view the radio schedule and upvote/downvote stations.

02 Demo & Source

Our demo is available at:
https://coveytownradiointerfacefrontend.onrender.com

Our GitHub repository can be found here:
https://github.com/neu-cs4530/covey-town-project-team-206

03 Tech Stack & Design Decisions

For this project, we built upon the existing Covey.Town codebase. The main implementation of our radio features includes creating a new interactable Radio Area. The visuals were created through the Tiled software and rendered through Phaser.
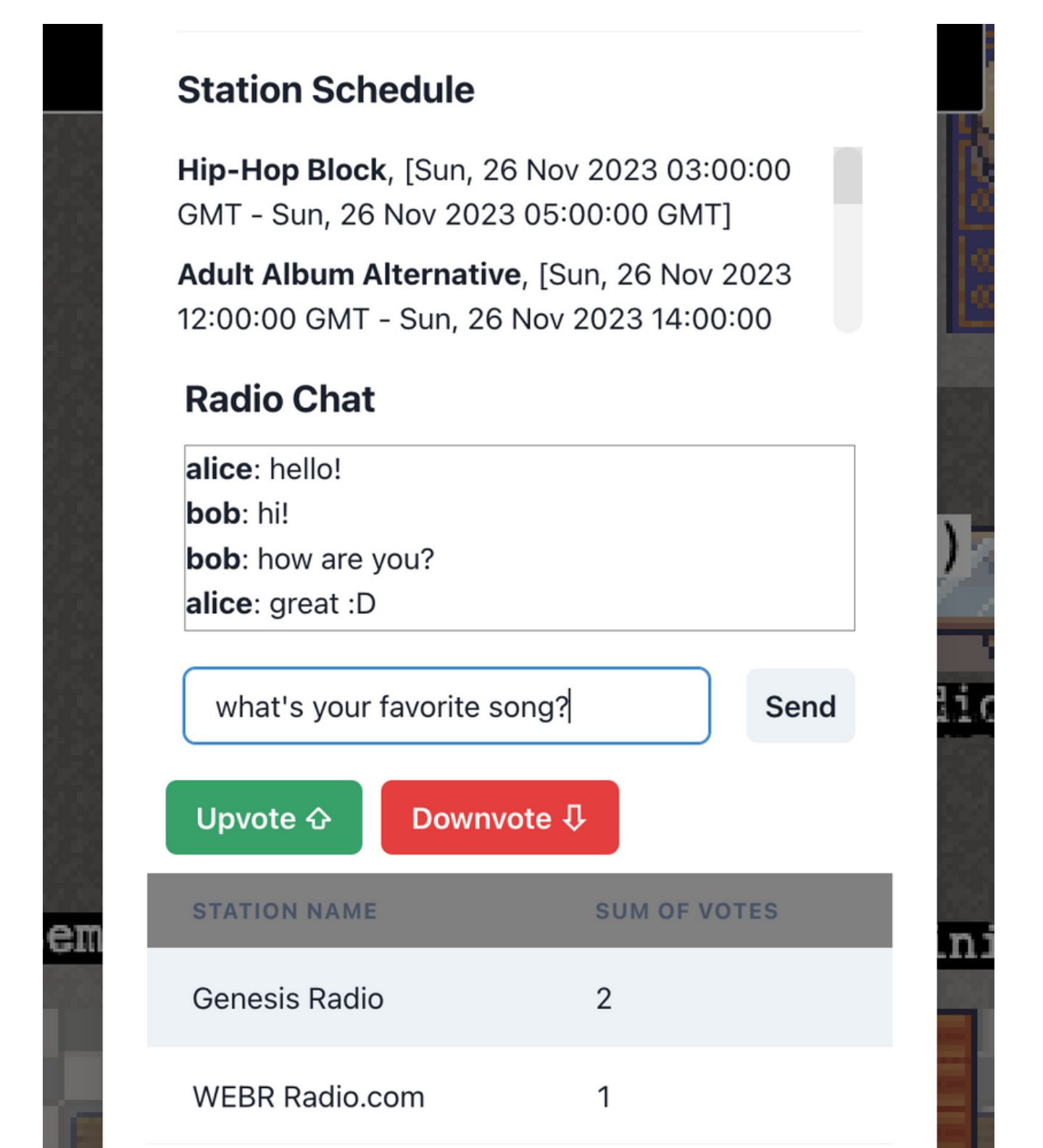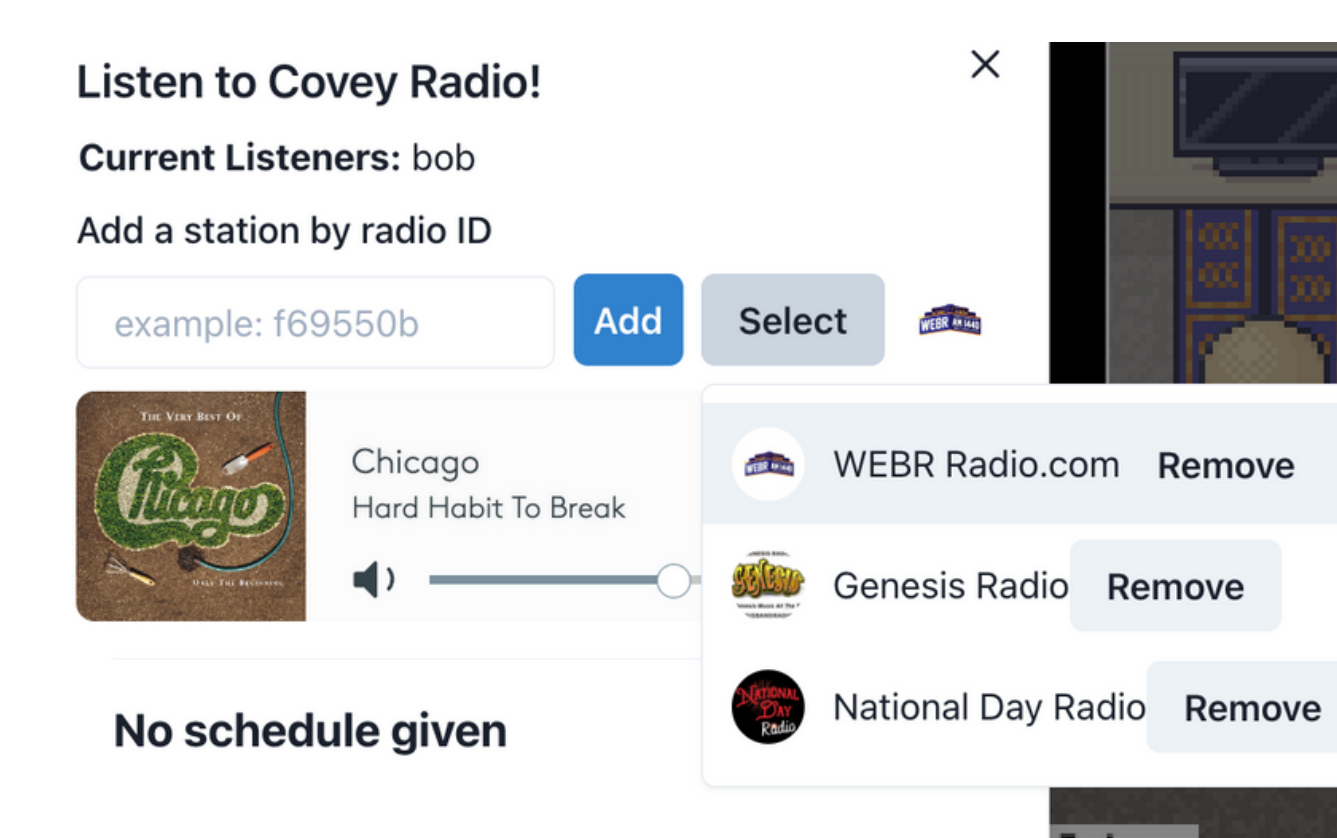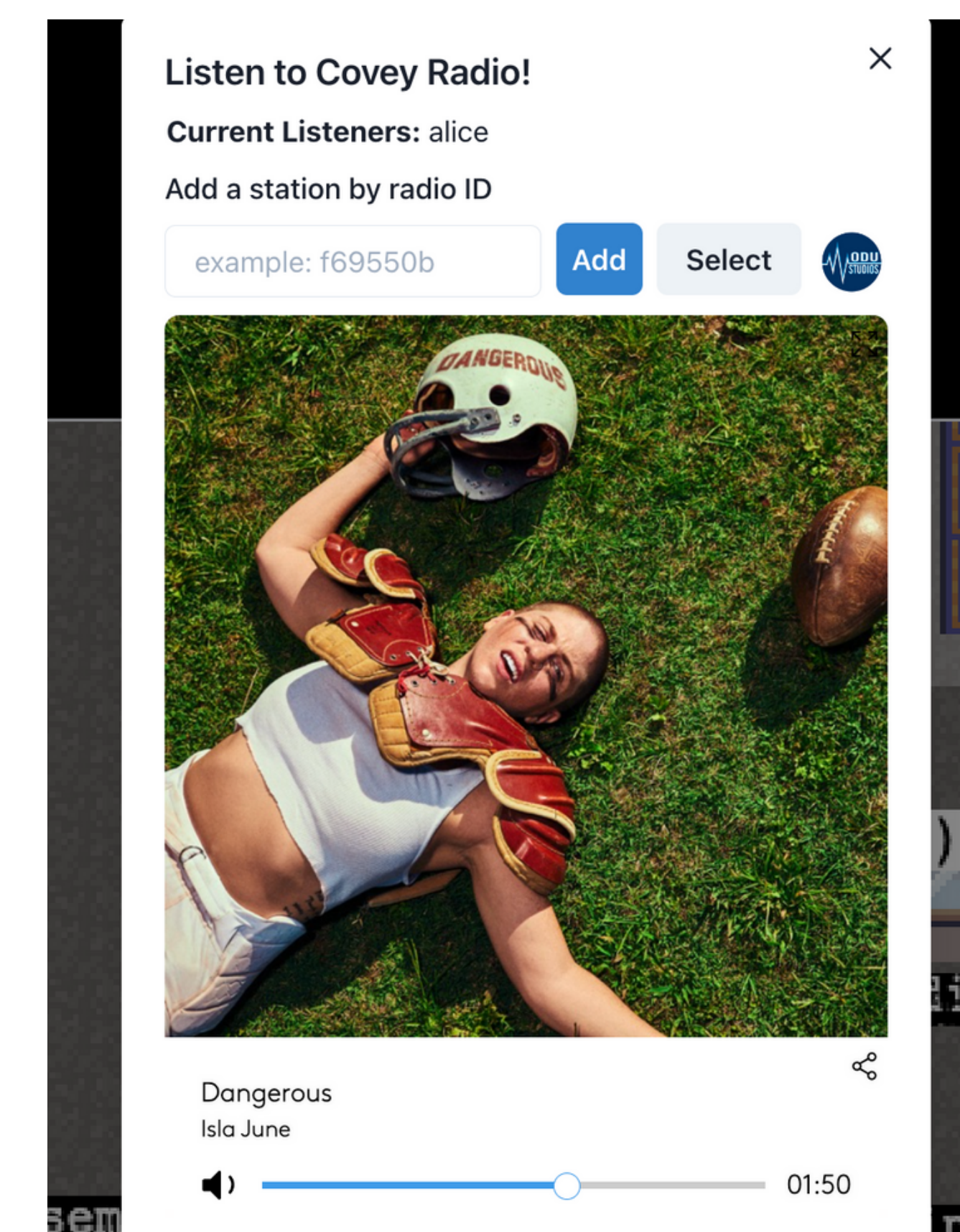The Radio.co API was used to pull in radio station streaming and other features, and new ones were built from scratch. React and Chakra UI were used to create the pop-up UI on activation of the area. We then deployed the product with Render.com. Our design involved creating new components to create separation between functions and making sure each method only completed one task.

04 Future Work

While we have included the fundamentals and some extensions of desirable features, there are various other possible add-ons. Players could have access to search through the entire library rather than just adding a few stations. The stations could be preloaded after creating a web scraper that collects all the existing stations. They could also have the ability to favorite stations that become easily accessible and constantly live on their radio pop-up across games. The visuals in the UI could be customizable to show a rotating vinyl. The area could be expanded so that they can interact with the radio regardless of where they are in the town and other players could see what they're currently listening to and click on it to hear the same station.

05 Features & Functionality

Improves the appeal and interactability of the game through a new Radio Listening Area. The area will allow users to listen to music stations, live talk-shows, or sporting events, all aired over internet radio.

Introduce themselves to new artists by being able to view the artist name, track name, length of the track, and album artwork.

Engages users in novel ways through the ability to upvote and downvote stations, view the list of upcoming stations through a schedule, and manually control playback and volume. After listening to a radio station, it gets added to a list of stations that users can easily click on or remove. Users are also able to communicate via in-game chat.