CS4530 Final Project: "Streaming Areas"
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Our Feature: Streaming Areas

Covey.Town is a great online tool for bringing people together by providing a space for users to connect with each other virtually. The current features in Covey.Town do not provide any specifics for interests other than having a conversation or watching a video. Thus, we created the idea: a StreamingArea. Streaming Areas will create a new way for Covey.Town players to connect with each other and share their common interests in a more specific format.

Our group created a new interactable area that utilizes the Twitch API to integrate Twitch livestreams into Covey.Town. With integration with the Twitch API, users will be able to set a Twitch stream to watch, play the live stream for any users in that interactable area, and send messages to the livestream's chat. Players will view a screen that shows the Twitch stream adjacent to the live chat. Streaming Areas are able to be added to towns, extending the general Interactable Area behavior.

Our Technology Stack and Design

We implemented the StreamingArea feature on top of the existing Covey.Town codebase. Each Streaming Area is represented as a an 'object' in the tilemap, which can be easily manipulated using the map editor, "Tiled." Each object is dynamically constructed when the map is loaded, and rendered on the screen by Phaser. The twitch stream is stored on the StreamingArea object. When a player enters an "empty" streaming area, a message is displayed inviting them to set the Twitch Stream, which is input through a React/Chakra model, and synced to each client using socket-io. When the Twitch Stream is loaded, a stream modal appears that allows users to view the stream and add comments to the live chat.
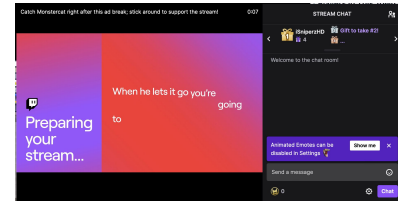
Our continuous integration pipeline runs an automated test suite in the frontend and backend components and deploys the site using Heroku

Future Work

When brainstorming our feature, our group originally wanted to include functionality that allowed users to browse categories before selecting a stream. This would allow users who may not be as familiar with Twitch explore their interests and find creators.

It would also be beneficial to add a side-chat for the users who are currently watching the twitch stream that is not attached to the stream's chat. This will allow the users to communicate directly with the others and connect.

Demo & Source

Our demo site is available at
https://fall-22-team-project-group-411.netlify.app
and our code at
https://github.com/neu-cs4530/fall-22-team-project-group-411.