CS4530 Final Project: " HangMan Game "
Group 607: Jeffrey, Teresa, Meng, Jessica

Our Feature : Hangman

Covey Town, as a virtual town platform, provides a unique and interactive way for users to connect, communicate, and collaborate in a virtual space, simulating real-world interactions. However, one aspect that could enhance user engagement and retention is the incorporation of interactive and social activities within the platform. Currently, while users can interact through various means of communication, there is a lack of casual, fun, and engaging activities that can be utilized to break the ice, foster a relaxed environment, and enhance social interactions among participants, especially in a more informal or social gathering within the platform.

The proposed feature, integrating the classic game of Hangman, aims to address this gap by providing an interactive, enjoyable, and socially engaging activity that users can participate in while interacting within Covey Town. The game will not only serve as a leisure activity but also as a tool to facilitate more vibrant and interactive social interaction.
This feature can be particularly beneficial in informal meetings, social gatherings, or events hosted on the platform, where participants can engage in a light-hearted activity together, thereby enhancing their overall experience and interaction within Covey Town. In addition, we will add a leaderboard feature to show players who have the most hangman game wins.

Our interest in implementing the Hangman game stems from the belief that interactive games are a catalyst for fostering social connections and creating memorable experiences in virtual spaces.
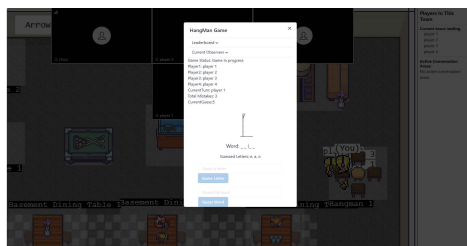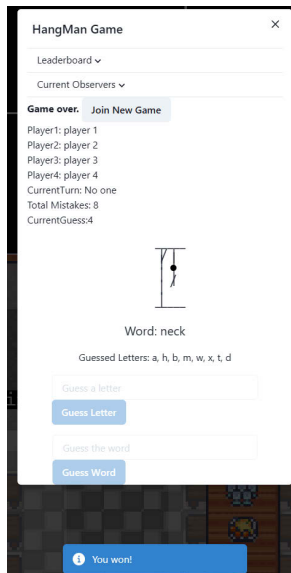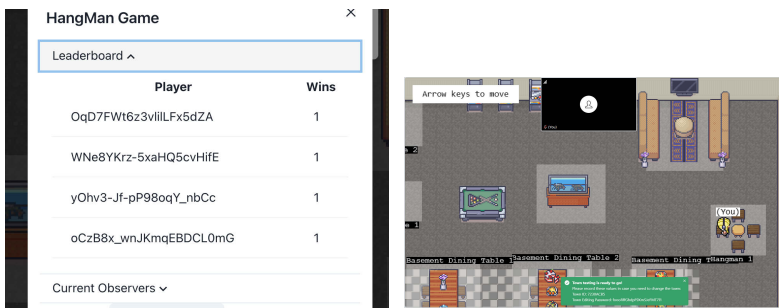
Our Technology Stack & Design

We implemented the Hangman game feature in the existing Covey.town codebase. The hangman game is represented as a new InteractableArea in Covey.town, with HangmanAreaController updating the game state in the frontend. Players interact with multiple React/Chakra modals, which emit events upon player interaction to allow players to create games, invite other players, and play the game. Our continuous integration pipeline runs an automated test suite on the frontend and backend components, and then deploys the site using On render.

Future Work

Our Hangman game holds significant potential for further enhancements, one of which is the integration of a communication feature, allowing players to interact with each other during gameplay. This addition empowers players to collaborate and strategize as a team to achieve victory in the Hangman game.

To address an existing challenge, we are considering disabling the controls for moving players' sprites while playing the Hangman game. Currently, when typing guesses, players have a chance of inadvertently leaving the game area, leading to an involuntary exit from the game. The controls for moving player sprites involve keybinds such as W, A, S, D, H, J, K, L, and arrow keys.

Another valuable improvement lies in the increased flexibility for player parties, accommodating 1 to 4 players. Unlike the previous requirement of a full complement of 4 players for the game to commence, it can now be enjoyed as a 1-player, 2-player, 3-player, or 4-player game. This modification provides a more versatile and inclusive gaming experience.

Lastly, we are exploring the possibility of introducing different types of Hangman game modes. While we currently offer a team-based game mode, there could be options for players to compete against each other individually or play as a team. This expansion of game modes aims to diversify the gaming experience and cater to varying preferences.

Demo & Source

Our demo site is available at https://six07frontend.onrender.com/ and our source code at https://github.com/neu-cs4530/fall23-covey-town-project-group-607