Our Feature: Casino Area

In the original release of Covey.Town, the majority of Covey.Town's fun elements are related to multiplayer games. Another issue is that the competitive nature doesn't extend outside the games themselves.

Therefore, to make Covey.Town a more fun and competitive space, we decided to implement a Casino Area where users can play BlackJack and Roulette. Users will be able to play with up to four people as well as alone and bet using our new currency system, CoveyCoins. They will also enable players to look at how they stand against the lobby at the new Leaderboard Area. Players are able to build up their CoveyCoin balance across towns and play sessions with our new account registration and login system. Players are able to view there coin count conveintnly in the top right corner of there screen at all times.

Demo and Source

Demo site: https://spring24-project-s24-group-508.onrender.com
Code: https://github.com/neu-cs4530/spring24-project-s24-group-508

Technology Stack

We implemented our feature by modifying the map to have an new area for the casino. In that new area we added new intractable areas for BlackJack, Roulette, and the Leaderboard. The two games were implemented by extending the Game Area abstract class. When a player interacts with a game, a Chakra modal pops up, allowing 1-4 players to join, place a bet, and then play the game just like a real game of BlackJack or Roulette. During gameplay, React hooks and sockets are used for communication between the frontend and backend, updating values and player coin amounts. A player's CoveyCoin balance is propagated from backend to frontend, as well as stored on a Firebase cloud database for persistence. Firebase Auth is used to allow players to create accounts that map to their CoveyCoin balances. All users can interact with the Leaderboard area in our casino area to see how their coin balance stands against all other users in the town. Our continuous integration pipeline runs an automated test suite on the frontend and backend components, and then deploys the site using Heroku and Netlify.

Future Work

One feature we struggled with was trying to do animations to make the gameplay look better and more fluid. Future work could polish up on this so that users can have a better gameplay experience. Another potential feature is the ability for users to use their CoveyCoins in some type of shop to purchase cosmetics. Currently the coins do not have any use outside of being shown on the Leaderboard.

Our CoveryCasino with custom assets and interactables for players to win big and have fun
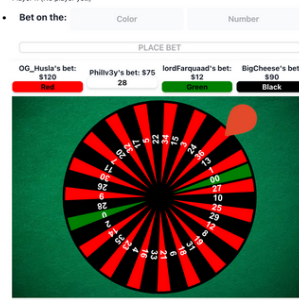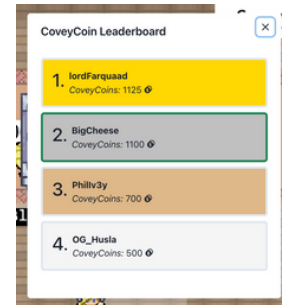

BlackJack can be played with up to 4 players with the players hand highlighted in green with an accompanying rules drop down and running hand totals to help the player

Roulete can also be played with up to 4 players with the players bet amounts and decision highlighted. Once all bets are placed a Roulette wheel spinning animation takes place

CoveyCoin Leaderboard displays the top three players in gold, silver, and bronze respectively and highlights our ranking in green