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## **Our Features: Blackjack & Roulette Areas**

Covey. Town has established itself as an engaging virtual space where members can interact and explore a variety of activities. However, one aspect that has been missing is the thrill and excitement associated with gambling activities, which can add a new layer of interaction and entertainment for the community. Introducing a gambling feature in the form of Covey Casino, specifically through a casino game area, directly addresses this gap. It offers members an interactive and social gaming experience that not only enriches the virtual environment but also introduces a competitive element that can foster community engagement.

The decision to develop the Covey Casino feature stems from a desire to enhance user interaction within Covey. Town by providing an activity that is both entertaining and immersive. Blackjack and roulette, being two of the most popular and universally recognized casino games, are an ideal choice for this initiative. The Blackjack's simplicity and depth allow for easy adoption by new players while offering strategic complexity for seasoned gamers. For more casual players, roulette provides an extremely simple but engaging option. Incorporating these features aligns with our goal to continuously evolve Covey. Town's offerings, ensuring that members have a diverse range of activities that cater to different interests. By adding casino games to a controlled and friendly environment, we aim to create a new focal point for community gathering, competition, and entertainment.

## **Demo and Source**

Our demo site is available at

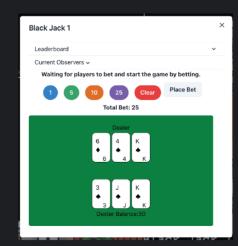
https://spring24-project-team-312-frontend.onrender.com/, and our code at github.com/neu-cs4530/spring24-project-team-312

## **Our Technology Stack & Design**

We integrated Covey Casino into Covey. Town, adding blackjack and roulette game areas as editable objects in the tilemap using Tiled. These areas come to life when users interact via React/Chakra modals for game actions. The backend, through CoveyTownController and socket.io, syncs game states across clients. User's balance is persistent, which is possible through our use of firebase to persist data with user's google logins. A UI sidebar updates in real-time with currency details, leveraging React hooks. Our CI pipeline tests and deploys updates via Heroku and Render.com, ensuring seamless gameplay and interaction.

## **Future Enhancements**

As we continue to develop the Covey Casino feature, a key area of focus will be expanding the variety of games available to our users, adding new dimensions of entertainment and engagement. This expansion could include a wider range of casino classics and innovative games, tailored to meet the diverse interests of our community. Additionally, to enhance the utility and enjoyment of accumulated currency, we plan to introduce an items shop. This shop will allow players to use their virtual winnings to purchase exclusive items, such as unique avatars, game enhancements, or special access within Covey. Town. These enhancements aim to create a more immersive and rewarding experience, encouraging deeper interaction and a sense of achievement within our virtual space.





Screenshots of new blackjack and roulette game in the casino room