



CS4530 Final Project: Covey Casino

Group 113: Andrew, Rajiv, and Jason

Demo: <https://coverycasino.onrender.com> **Source:** <https://github.com/neu-cs4530/spring24-project-team-113>

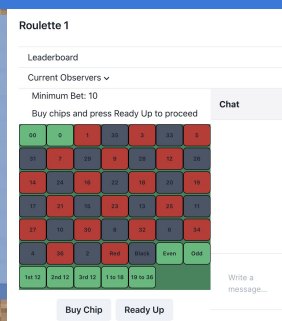
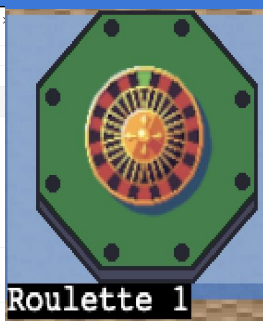
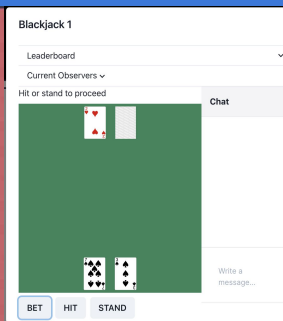
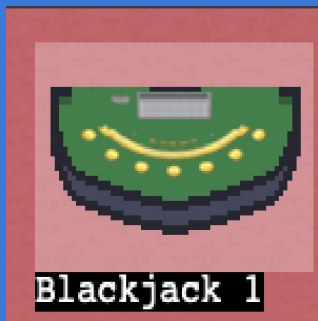


Our Feature: Blackjack & Roulette

We brought gambling to CoveyTown! Now the town members can enjoy the thrill of winning and losing virtual money.

Every player will start with a balance of \$100 which they can use at our blackjack and roulette tables. You are able to play against our automatic dealer. Just like the real game you are able to bet, hit, and stand. Unfortunately the player are unable to split, but that will be a future addition! For roulette, you and a group of friends are able to play at the same time.

Placing bets on the tables and watching your fates being decided by a single number.



Our Tech Stack and Design

Our implementations of Covey Casino led to an addition of four new systems, blackjack, roulette, currency, and betting. The process of creating the games themselves followed a very similar structure to the existing games in CoveyTown, where games are managed by a game area and interacted with using an area controller.

The currency feature was seamlessly integrated into the existing architecture by adding a Current Controller singleton instance, similar to the TownsStore, which associate's player IDs with numeric balances, that can be accessed and updated from anywhere in the server. The betting functionality is isolated from the rest of the architecture. Games use a betting controller to access player currencies and make bets that affect their balance.

Future Work

Currently our casino only has playable blackjack and roulette tables. Further work on our current games would be adding splitting and multiplayer to blackjack and betting corners in roulette. In order to simulate an actual casino we would need to implement more games such as poker, baccarat, craps, and many more.

Also, we can expand our currency system to a greater scale, outside of the casino. Meaning that the player could be able to purchase collectables and items throughout the town with their winnings!