

Movement Speed Casino

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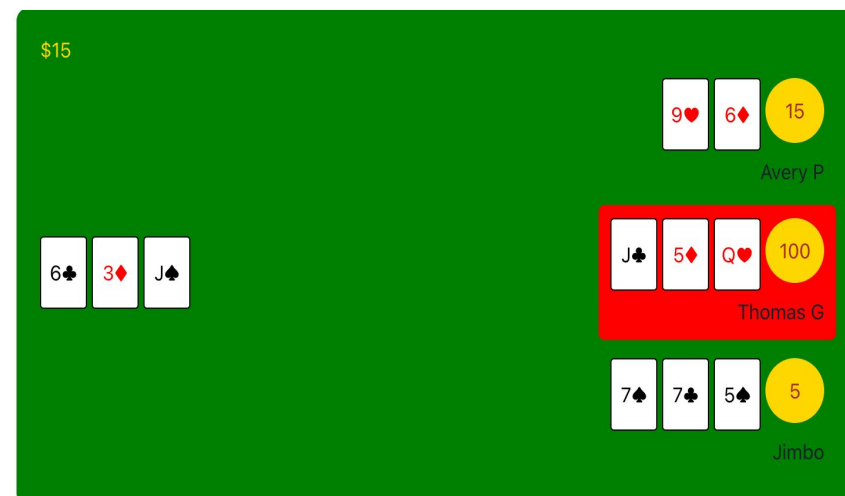
Games and Rewards

The original Covey.Town release included two games - tic tac toe and connect four. While these games are a good foundation, we felt that other games were also well suited to Covey.Town's environment and would add depth to the range of available social interactions.

Our additions are two classic casino games, blackjack and poker. Both are card games with betting mechanics which can work with an automated dealer, meaning that players can start a new game whenever they want. To add value to winning and losing we also introduced a currency that directly translates into players' movement speeds, with big winners moving quickly around the map while losers would be stuck at a snail's pace. This adds a simple but compelling incentive to the games.

Demo and Source

Our demo is available [here](#), and our source is [here](#).



Technology and Design

Our work builds upon the existing Covey.Town codebase. Poker and blackjack have distinct implementations of Game and GameArea in the backend and GameAreaController in the frontend, just like tic tac toe and connect four. Both games use the same implementation of cards, as defined in the CoveyTownSocket file. These games are accessible from their respective labeled areas on the map. The games begin once all players have committed their initial bets and, once concluded as per the rules of the game, the winnings (or losses) are reflected in the player's money, and in turn their movement speed. Player Money is persisted through a Firestore database, in which we have a document of users, mapping usernames, passwords, and money/speed. We have a CI/CD pipeline through Heroku for the town service backend and Render for the frontend.

Future Work

This work can be easily expanded upon by adding additional casino games such as roulette and slots. We could also expand the rules of these games to handle some of the more complex optional variants, such as side pots and all-ins in poker.

