

CS4530 PROJECT POSTER - BLACKJACK

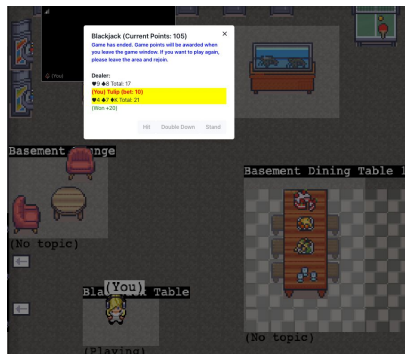
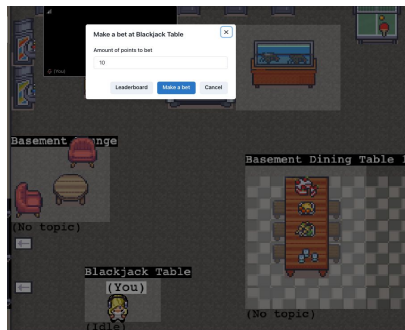
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FEATURE: BLACKJACK AREA

Covey.Town now has a new form of interaction - Game Areas. The game we designed for our Game Area is Blackjack. Our group believed that game areas in Covey.Town would be an interesting new way for players to interact with towns and with each other, with an added layer of competitive spirit using a leaderboard mechanism.

FUTURE WORK

We believe that future work on Blackjack would include improved visuals, including a table and pixel-art card views, along with Split functionality which a regular game of Blackjack has. We also believe that the GameArea interface can be extended to make different types of games to enable Covey.Town to be more engaging for players.



TECHNOLOGY STACK AND DESIGN

We implemented the GameArea abstract class which extends the InteractableArea abstract class and the BlackjackArea class which extends it in the existing Covey.Town codebase. Each BlackjackArea is represented as an object in the map called Blackjack Table, and each player in a game of Blackjack is represented with a BlackjackPlayer object which contains all necessary fields including their bet and their hand of cards. During gameplay, React hooks and sockets are used to simultaneously enable communication between the backend and frontend, and update and render cards and the total hand value for all players and the computerized dealer. Our continuous integration pipeline runs an automated test suite on the frontend and backend components, and then deploys the site using Heroku and Netlify.

DEMO AND SOURCE

Our demo site is available on [Netlify](#) and our source code is available on [GitHub](#).