CS4530 Final Project: "Chess"

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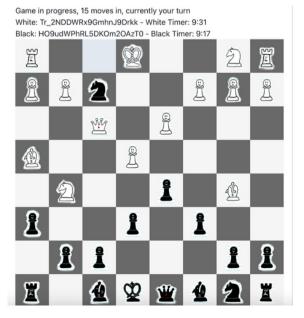
Our Feature: Chess

In the current release of Covey Town, users could connect to the 2D styled map and chat, share videos with each other, and view the beautiful art around the building. However, Covey.Town was sorely lacking some fun games to play with your friends.

We developed an implementation of chess, a classic game that will spruce up Covey.Town and make it a bit more enjoyable for its players.

Demo and Source

Our demo is available at: https://chess-final-project-group-411.onrender.com, and our code at https://github.com/neu-cs4530/fall23-team-project-group-411

Game in progress, 15 moves in, currently your turn
White: Tr_2NDDWRx9GmhnJ9Drkk - White Timer: 9:31
Black: HO9udWPhRL5DKOm2OAzT0 - Black Timer: 9:17

Our Technology Stack & Design

We implemented this chess game in the existing Covey.Town codebase. We started by editing the map of Covey.Town and creating an Interactable Area that contained our chess game. When a player enters this area, they can press spacebar to start viewing the current game, or be able to join a game that has not started yet. Once two players join, the board is rendered using React/Chakra, as well as our ChessAreaController backend. Our backend uses an object-oriented approach to dealing with each piece in a chess game, as well as how we handle moves.

Our integration pipeline runs an automated test suite on both frontend and backend code, and deploys to our site using Render.

Future Work

We want to add more customization features to the game to add some variety to the game. While you can select what pace the game will run at, you are still just playing normal chess. We want to implement some variations, such as duck chess, fog chess, and more. This will require some changes to the backend, but not that many for the frontend thanks to our design.