

CS4530 Final Project: CORDLE

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Link to Repo: <https://github.com/neu-cs4530/spring24-project-team-107/>

Demo Site: <https://spring24-project-team-107.onrender.com/>

Description

In the original Covey.Town platform, users can connect through chat and video interactions. We introduced a multiplayer Cordle game feature, enabling collaborative and competitive word guessing. Players can join games, select difficulty levels, and engage in real-time gameplay, fostering teamwork and friendly competition.

How to Play

Begin or join a game session with easy, medium, or hard difficulty levels. Take turns guessing letters and receive instant feedback. Use in-game chat to communicate and spectate ongoing games with interactive chat features. Leave spectating sessions at any time.

Technology Stack

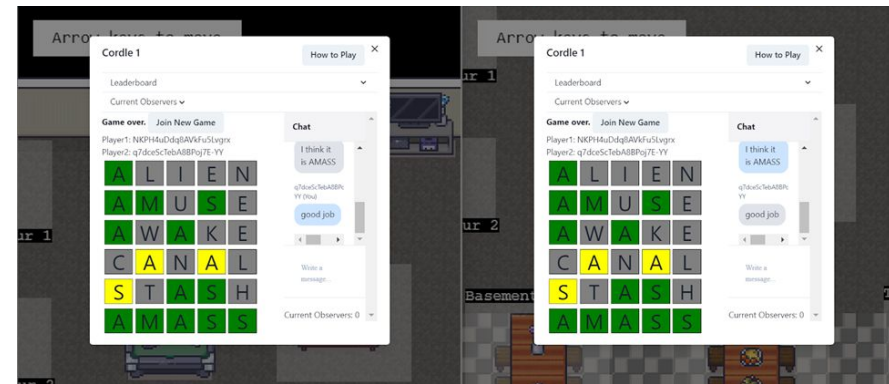
Backend: Implemented a CordleGame and CordleGameArea to handle game logic and interactions. Game logic is similar to that of the New York Times Wordle game but with added support for two players.

Frontend: Developed React components for the game board, difficulty selection, and the game area. Also created a CordleAreaController for handling information passed to the frontend from the backend.

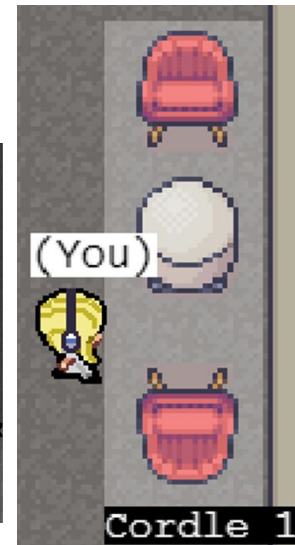
Integration: Utilized CoveyTownSocket for bidirectional communication between frontend and backend

Game Algorithm and Mechanics

The game randomly selects a word from specific difficulty-level word lists. Players guess letters to form words, receiving real-time feedback on correctness and position. Feedback colors letters: green for correct position, yellow for correct letter in wrong position, and gray for incorrect letters.



Example of two players playing the Cordle game, taking turns guessing words. Spectators are watching and utilizing the chat function. Order of words demonstrates guessing algorithm in action.



Player navigating to the Cordle Area to play the game.

Future Work

- Enhance the spectator experience by allowing spectators to view the word and have the chat feature censor the word if they attempt to spoil it for the players.
- Organize periodic Cordle tournaments with competitive brackets and prizes for top performers, adding an extra layer of excitement and motivation for players.
- Enable players to specify which mode they're playing in.