# CS4530 Final Project: "Shovey"

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Our Feature: Shogi

CoveyTown is a platform on which many users can interact with one another. There should be an option for users to face each other in a fun game that can either be fast and dynamic or slow and thoughtful. This lends itself to a one-on-one game like Chess, but there are countless Chess platforms out there and others have likely thought of building it for CoveyTown. Go is another popular board game, arguably even more skillful, but most people are not familiar with it. Thus, we sought to find a similar game to Chess, unique enough to feel fresh and new while also being familiar enough so that users could figure out the rules just by playing a few times. That game is Shogi, a popular variant of Chess in Japan.
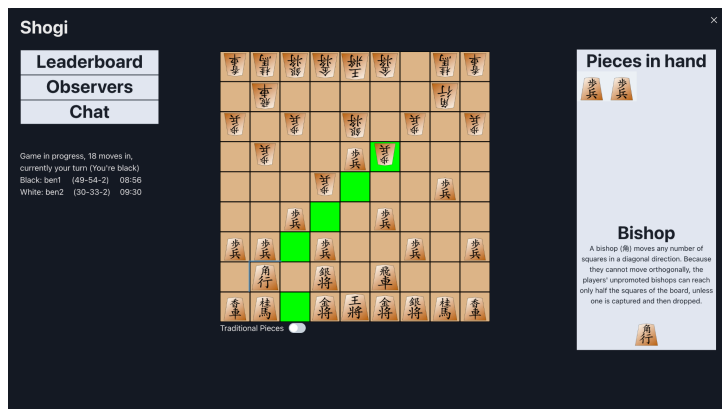
Our Technology Stack & Design

We used the same structure as the TicTacToe and the Connect Four game. ShogiGame is responsible for joining, starting, and leaving the game, as well as all game logic and the engine algorithm. ShogiGameArea and ShogiAreaController handle the overall model and calls from client to server. ShogiArea allowed for the environment for players to play against each other or the computer. ShogiBoard displayed the board in the area.

The MVC design of the project allowed for a structured development approach that offered enhanced modularity that provided ease of testing and maintainability. It also improved our ability to assign tasks and work in parallel.

For maintaining user data, we used Firebase Authentication (email/password) and stored the shogi records for each email in a Firstore Database

Future Work

Our biggest idea for future work would be improving the capabilities to teach players the game of Shogi. The game is not very well known but is heavily related to traditional chess. A simple tutorial to show the player the pieces and their respective names and rulesets would help make the game more accessible.

Demo and Source

Demo site: https://shogi-301.onrender.com/

Source site: https://github.com/neu-cs4530/spring24-project-team-301