

## Networking

For our game to accommodate networking a few things will need to be changed and added to the game. To begin, the interface for the game itself doesn't need to be changed much as it displays all the information needed to all the players already. What would need to be changed is the interface for starting the game. In our current design we have it setup to enter all the information about the players at once. This will need to be changed to just allowing the players to fill out their own information. We would also change the interface to allow players to join games that are hosted by another player, as this is how we will allow the players to start the game.

For the current game state, we have variables that hold information for the logic of the game to decide the current state of the game. The problem would be in the way we keep track of the stacks as constantly sharing the information for all the stacks would be demanding on the network and could cause slowdowns. We would implement a system to just account for the information that each players system needs to understand the state of the game, rather than all the information.

Currently we use an integer variable to decide whose turn it is. This would work on several computers as this is the only information that needs to be sent between the computers to know who's turn it is. For starting the game, we would create a start button that is only available to the player who created the game session to start the game whenever they are ready. This will cause any open player slots to be filled with AI, of the difficulty specified by the host, automatically. For the end of the game a Boolean variable could be used as a flag to all systems to know when the game has ended.