Future Networking of Blokus

In order for us to release a networked version of Blokus, several additions (or changes) would need to be implemented. One aspect that would require some adjustments would be our user interface. Our project currently supports one player at a time to be shown on the UI, displaying only one set of pieces at any given time; this would need to be modified. For our networked version of Blokus, we would update our UI so that each player participating will be visible throughout gameplay, along with each player's pieces and each player's name/username (or as a CPU). Modifications to the start-up UI would also have to be made which could include a login button, to facilitate login functionality.

It would also be important to incorporate a separate networking class to facilitate a networked version of our project. Based on experience level of group members (among other factors), our project will implement a Peer to Peer (P2P) networking architecture; this would mean that there would be a host, and up to three clients connecting. The host system would allow the host to invite other players to join their session; the host would also have the capability of saving the current session on their system.

The most challenging aspect of networking Blokus would be to ensure that all players are seeing the same updates during gameplay (i.e., whenever a move is made on the host's system, the host system sends a message to clients, and vice versa). Elements that are required to sync between all players (host and clients) include:

- Tiles on the game board after each turn,
- Number of human versus CPU players,
- Difficulty level of CPU player(s),
- Score of each player,
- Pieces still available to each player,
- And so on…

The syncing of these elements will be handled by the network class.

The information presented here is not complete, or exclusive, and further analysis will need to be performed in order to begin the implementation of a networked version of Blokus.