Networking –

The best option to implement an online multiplayer mode would be a serverclient system. This system allows every player to be connected as a client and all necessary information will be sent back and forth to the server which will keep the board updated.

The game setup interface will remain the same with an addition of a column "Connected players" with a list of players connected to the server. They can choose a color and their name would show on it. The host player will initiate the game.

The game itself will remain unchanged with a few minor adjustments to accommodate other active players. The current design of The Game of Focus allows an easy switch to online multiplayers to play as intended as all necessary information is visible. Players with an active turn can make a move on the board. With each move, the turn is passed to the next player.

All the player moves, and position will be saved on the server. With each turn, the players new position will be sent to the server which will update the board for other players. This way, players will be aware of every move being made and the board will be constantly updated.

The game will start with a random player and pass it to the next player after they placed their move. Each turn will be updated to the server and passed on to the other players (clients). It will also be mentioned at the bottom of the window whose turn it is (Active player: x) to eliminate any confusion. At the end of the game, which ever player is dominating, their name will pop-up on the screen as "Player x wins!". This will ensure that the game has ended and player x has won.