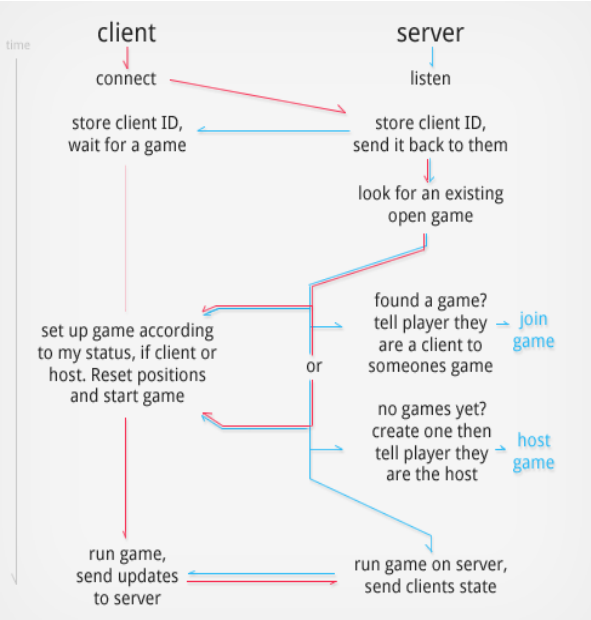
NETWORKING

- **How will information in our game be passed between several computers?**
  - First, the UI needs to be altered a bit, such as, adding an UI that gives the user the choices to connect with other players (networking) or the physically present human players since our current game is designed for the latter choice. Also, the modified UI should display if any player has been able to connect successfully.
  - The host of the game will have a different UI from other players who join, since certain options like the option to play with physical players or not is only relevant to the host.
  - As the game begins to play, server sends info to the clients to update them on the current state, then actions taken by the clients (other players) is sent to the server (repeats process), as in the diagram below. (ref: fig. 1)



This is how information of the current state of the game is being passed across.

- We will pass information just enough for each client since overloading the server with tasks to send all information to update all clients can lead to lagging of smooth running of the game. (ref: https://speedify.com).

- **How will control be passed between several computers?**
  - We will need to modify the method which is responsible for taking turns in the game so that, the current state of the game and the player to take the next turn is passed in that method. Then, the player whose turn is next should receive a notification, informing that the player is to play next. (ref: turn-based Multiplayer)
  - As mentioned earlier, since the host/server will have a different UI from the clients, only the host will be given the options to start (when all clients have successfully connected) and end the game (at his/her own convenience) so to have full control of start/end game. The clients should receive a notification such as “Start game”, “The host has ended the game”.