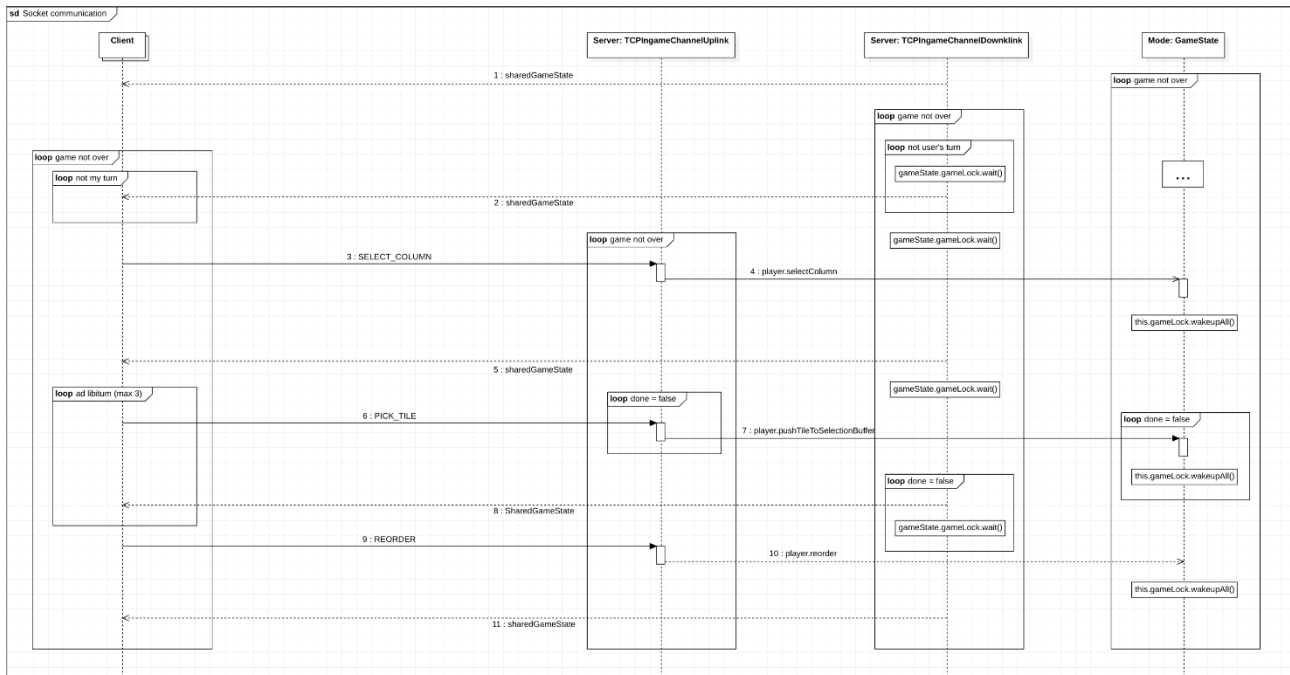


2. Tiles' pick and insertion into the library + 3. Achievement of common objectives - TurnSimulation



The TCPingameChannelDownlink (Server to Client communication) is a thread synchronized on GameState's lock; it is awakened every time a player makes a move and it shares to each player the personalized SharedGameState. When the client message contains an incorrect move, the returned SharedGameState is not changed and the player can repeat the move.

The client's turn starts with the communication to the server of the library's selected column, through the TCPingameChannelUplink (Client to Server communication). Then, when the client picks a tile from the board, it is pushed in a selection buffer and the server returns a new SharedGameState containing the new pickable tiles. The client can repeat this action at least three times, then the selection buffer can be reordered and at the end tiles are pushed into the player's library in the chosen order. The reorder message causes the call to "end of turn" methods, including the one that checks the achievement of common objectives. The last SharedGameState contains the goals completed by the end of the turn.

Additional notes:

- Throughout all these transmissions, the client (both Socket and jRMI) is also sending regular *keep-alive* pings to the server to avoid channel closure. These messages have been omitted from the diagram to avoid cluttering.
- As opposed to having TCP uplink and downlink channels, jRMI in-game transmissions make use of a specific remote object: "[gameId]/[username]".