Here’s the message formats for sending information between client and servers (application side). The words “player”, “user”, and “client” are used interchangeably.

Client 🡪 Server:

|  |  |  |
| --- | --- | --- |
| Name | Format | Description |
| Logon Request | “LR: ” | Request for a new user to join the lobby and wait for a game. |
| Send Username | “SU: username, user\_id” | Sends a username to be associated with the player’s user\_id. Not necessarily unique username on the server. |
| Send move | “SM: game\_id, user\_id, move” | Send movement information to the game with gam\_id and the user with user\_id. 0 for up, 1 for down. |
| Quit or Rematch | “QR: game\_id, user\_id, option” | After a loss is recorded, ask each user whether to quit to lobby or rematch same opponent. Option can be R for remath or Quit for quit to lobby. |
| Begin Matchmaking | “BM: user\_id” | Indicates to server to begin matchmaking. |
| Disconnect | “D: user\_id” | “Disconnects” user from the server (just deletes them from the player list). |

Server 🡪 Client:

|  |  |  |
| --- | --- | --- |
| Name | Format | Description |
| Username Request | “UR: user\_id” | Requests the client to send a username to associate with their user\_id. |
| Direct to Lobby | “TL: ” | Directs the player to the lobby after he has supplied a username or requests new matchmaking. |
| Update Game State | “UGS: player1\_pos, player\_2 pos, ball\_x\_pos, ball\_y\_pos, player1\_score, player2\_score, is\_loss” | (All one line, no new line character between fields). Sends game state information to be rendered client side. |
| Game Over | “GO: ” | Directs client to a rematch or quit screen. |