Poker lobby protocol

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1 Introduction

A protocol for client-server communication in a table lobby, where a player can browse open games and join them. Players can also create their own tables, and change settings for them. The protocol has two phases: when a player joins the lobby, they will receive the entire state of the lobby. Afterwards, they only receive *updates* to the lobby, i.e. when other players enter/leave and join/leave tables. The client passively receives information from the server and must keep track of that, and cannot request specific pieces of information.

The protocol is based on passing simple text commands. Each command is terminated by a newline, and commands are separated into tokens as specified in the "tokens" section. The first token is always the command name. If the client or server receives a command with an unknown command name, the whole command should be ignored, and communication should continue as normal afterwards. If a known command is illegally formatted, however, the client should show an error.

2 Tokens

Each command consists of one or more tokens. Normally, each token is a single "word" (sequence of characters delimited by one or more whitespaces), but a token can also be several words inside ascii quotation marks. For example:

- stackSizes 0 1000 1 1000 tokenizes to ["stacksizes", "0", "1000", "1", "1000"]
- name "Svein Jonny" tokenizes to ["name", "Svein Jonny"]

3 Sending the whole lobby

When a new client connects, they need to be sent all information about the lobby. This should only be sent once during initialization.

playerNames <id1 name1> <id2 name2> ...

The ID and name of all the players in the lobby, including those on unstarted tables

Sends information about a single table. If there are many open tables, this must be sent for each of them.

lobbySent

The server is finished sending lobby information. After this, the client should only expect lobby updates.

4 Sending lobby updates

When a client has received the initial lobby, all further lobby changes are sent as lobby updates.

playerJoinedLobby <ID> <name>

A new player connected to the lobby

playerLeftLobby <ID>

A player left the lobby

playerJoinedTable <playerID> <tableId>

A player joined the table

playerLeftTable <playerID> <tableId>

A player left the table

tableCreated <tableId>

A new table was created. Table settings and the players in it are sent as table-Settings and playerJoinedTable

tableDeleted <tableId>

A table was deleted, either because the owner chose to disband it, or because the game was started and the players left the lobby. The server must send playerLeftLobby commands for the players on that table.

$table Settings < < setting 1 \ value 1> < setting 2 \ value 2> \\ ...>$

Sends the table's settings. All the table's settings should generally be sent every time on is changed, but if a setting is not sent, the old/default one should be kept.

errorMessage < message >

Sent if the client tried to do something illegal, like joining a full table. Is usually only sent to the player that did the action.

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Possible table settings:

maxNumberOfPlayers <n>
startStack <n>
smallBlind <n>
bigBlind <n>
levelDuration <n>
playerClock <n> Time the player has to make each move, in seconds.

aiType <Simple | Mixed | Advanced> The type of AI you want to play against, if there are not enough human players
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5 Example playthrough

Server playerJoinedTable 1 0

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Client lobby Morten

Server lobbyok

Server playerNames 0 Kristian 2 Kaja 3 Mariah

Server table 2 settings smallBlind 25 bigBlind 50 players 0

Server table 3 settings smallBlind 50 bigBlind 100 players 2 3

Server lobbySent

Server playerJoinedLobby 1 Morten

Server tableCreated 0 // Morten creates a new table

Server tableSettings 0 smallBlind 25 bigBlind 100 maxNumberOfPlayers 2
```

 ${\bf Server}\,$ player Left
Table 0 2 // Kristian leaves his table and joins Morten's

 ${\bf Server} \ \ {\bf table Deleted} \ 2$

 ${\bf Server} \ \ {\bf player Joined Table} \ 0 \ 1$

Server table Deleted 0 // They start a game

 ${\bf Server} \;\; {\bf playerLeftLobby} \; 0$

 ${\bf Server} \;\; {\bf playerLeftLobby} \; 1$