**Netzwerkprotokoll:**

CS: Client -> Server

SC: Server-> Client

ERROR (marked with an «E » at the beginning, for example: EWHS for ERROR in whisperchat)

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| --- | --- | --- | --- |
|  | Transmitted Keyword | Player input (only CS) lowercase/uppercase ignored | Description |
| CS | YEAH | yeah | Player uses the username of his system |
| CS | NAME String | *name* | Player changes his name |
| CS | QUIT | quit | Player leaves the game |
| CS | HLP1 | help | Player wants a list of all keywords on the clientside |
| SC | HLP2 |  | Server shows list of all keywords on the clientside |
| CS | PLL1 | playerlist | Player wants to see who is connected to the server |
| SC | PLL2 |  | Server shows a list of currently connected players |
| CS | GML1 | gamelist | Player wants to see open, ongoing and finished games |
| SC | GML2 |  | Server shows open, ongoing and finished games |
| CS | HSC1 | highscore | Player wants to see high score |
| SC | HSC2 |  | Server shows high score |
| CS | CHA1 | chat | Player joins chat |
| SC | CHA2 |  | Server announces that the player joined the chat |
| CS | QCH1 | quit chat | Player leaves chat |
| SC | QCH2 |  | Server closes the chat for the player |
| CS | WHS1 String | whisper *client\_id* | Player wants to enter a whisper-chat with other player (client\_ID) |
| SC | EWHS |  | Server gives an ERROR if the chosen player for whisper-chat does not exist or is already in a whisper-chat |
| SC | WHS2 |  | Server announces to both players that they are in a whisper-chat with each other |
| CS | QWH1 | quit whisperchat | Player leaves whisper-chat |
| SC | QWH2 |  | Server announces that the player left the whisper-chat and closes it |
| CS | BRC1 | broadcastchat | Player enters Broadcast |
| SC | BRC2 |  | Server announces that the player is in broadcastchat |
| CS | QBR1 | quit broadcastchat | Player leaves Broadcast |
| SC | QBR2 |  | Server announces to the player is not in the broadcastchat anymore |
| CS | CRE1 String | creategame *game\_ID* | Player creates a new game with an individual game\_ID |
| SC | CRE2 String |  | Server creates game and shows that max. 4 players can be in this game and how many Players already are in this game |
| CS | JON1 game\_ID | join *game\_ID* | Player joins a created game from the lobby with the fitting game\_ID |
| SC | EJON String |  | Serves gives an ERROR if the game is full or/and started already or the game\_ID does not exist |
| SC | JON2 |  | Server announces that the player successfully joined the game and how many players are in the game |
| CS | STR1 | start | Player starts the game of the game he’s currently inside |
| SC | STR2 |  | Server starts the game |
| SC | RNDS |  | Server shows how many rounds are left |
| SC | YTRN |  | Server announces if it is the players turn |
| SC | DICE |  | Server “rolls dice” and shows the steps the player got |
| CS | HEAD | up | Player moves one block up in the game |
| CS | DOWN | down | Player moves one block down in the game |
| CS | LEFT | left | Player moves one block left in the game |
| CS | RGHT | right | Player moves one block right in the game |
| SC | ERMO String |  | Server gives an ERROR if the player makes an invalid move |
| SC | POIN |  | Server shows the points the player gets for the landing on the block |
| SC | POIC |  | Server shows the points the player got for collecting the coin |
| SC | SCOR |  | Server shows the players score |
| SC | STPL |  | Server shows how many steps the player got left |
| SC | STPX |  | Server announces that the player got no more moves left |
| SC | EVEN |  | Server announces that an event is happening (flood or earthquake) |
| SC | DEAD |  | Server signals that the player is hit by an event and the player will return to the starting position |
| SC | MIPO |  | Server subtracts points from score when the player is hit by an event |
| SC | NTRN |  | Server announces the next turn |
| SC | RNDX |  | Server announces that there are no rounds left |
| SC | SCRE |  | Server announces that there is an even score between two or more players |
| SC | RNDA |  | Server adds an extra round |
| SC | WINX |  | Server announces winner |
| SC | HGHN |  | Server adds new high score |
| SC | ENDX |  | Server closes game |