Protocol

Gruppe 7 - Key H(a)unt March 2023

Encoding of network traffic

The Structure of any message traversing the network is identical, first the short form of the command to be followed/executed is sent, then, after the delimiter "~", optionally parameters are sent, each separated by another delimiter. Finally, after the last delimiter any messages in plain text will be sent. For example, a valid message would be: "CHAT~Hello World!". Generally, it would look like "CMD~param1~param2~msg".

Table 1: Protocol code with short description

Command	Short Command	Description
GLOBALCHAT	CHAT	Client to Server: The client sends a message to the server for the global chat Example: CHAT~msg
BROADCAST	BCST	Server sends message to every player/client Example: BCST~msg
ERROR	ERRR	Server sends error to client Example:
NOTFOUND		gets returned in case no command matches Example:
CHANGENICKNAME	CNGN	command send by the client to change his nickname Example: CNGN~ nickname
PING	PING	sends a ping message Example: PING
PONG	PONG	Used to send a Pong back Example: PONG
DISCONNECT	DSCN	is used to force disconnects, effectively closing the socket Example: DSCN
LOGOUT	LOGO	Client can logout and disconnect himself Example:
DISPLAY	DSPL	The client just prints the message it re- ceives in the GUI Example: DSPL

Table 2: Protocol code with short description

Command	Short Command	Description
CREATELOBBY	CLOB	Client to Server: The client gives the server a new Lobby Name and the server creates a new lobby and puts the client in it. Example: CLOB~lobbyname
JOINLOBBY	JLOB	Client to Server: Client gives the name of the lobby he wants to join and the server puts him in it. Example: JLOB~lobbyname
LOBBYCHAT	LCHT	Client sends a chat message to the server for the lobby Example: LCHT~message
CLOSELOBBY	QLOB	closes the lobby and removes all players from the lobby Example: QLOB
LEAVELOBBY	LLOB	Client to Server: Client leaves the lobby Example: LLOB
GAMEACTION	GMAC	Client to Server: Every Action related to game gets send as a parameter of this command. Example: GAMEACTION~ MOVE~NORTH Note that the command "MOVE" gets further decoded in the Game package on the server side.

Table 3: Protocol code with short description

Command	Short Command	Description
TOGGLEREADY	TRDY	Switch for the ready status of the player Example: TRDY
REQUESTACTION	REQA	Server to Client: Server requests the Client to make an Action related to the game. Example: REQA
ROOMINFO	RINF	Server to Client: Provides the informations about the room the player is in. Example: RINF
WHISPER	WHIP	Client to Server: Client sends the other Clients name and his message for the other Client to the server. Example: WHIP~ clientName~message
PLAYERLIST	PLST	used, if the client wants to get a list of all connected players in his lobby, or in the server as a whole; takes "server" or "lobby" as an argument to differentiate the two cases. Example: PLST ~server
GAMELIST	GLST	displays all past and current games of all open lobbies Example: GLST