#### **M2 TEAM PROTOCOL DOCUMENTATION**

## Type of message:

The messages that are going to be used in this protocol are Strings, and the arguments are separated with the symbol "~". If an argument consists of more elements, then they are split by the symbol comma (,).

Examples of initial messages:

From	То	Message
Client A	Server	CONNECT~Andrei~3
Server	Client A	HELLO~Andrei~3
Client B	Server	CONNECT~Harveer~3
Server	Client B	HELLO~Harveer~3
Server	Client A	PLAYERLIST~Andrei,Harveer

Examples of regular messages during the game:

From	То	Message	
Server	Client A	SHOW_HAND~Defuse, Attack, See The Future, Skip, Rainbow Ralph	
Client A	Server	PLAY_CARD~See The Future	
Server	Client A	BROADCAST_MOVE~Harveer, See The Future	
Client A	Server	DRAW_CARD~Defuse	
Server	Client B	SHOW_HAND~Defuse, Attack, Slap, Slap, Nope	
Client B	Server	PLAY_CARD~Slap	

Example of an exception during the game:

From	То	Message	
Server	Client A	SHOW_HAND~Defuse, Reverse, Defuse, Reverse, Taco Cat	
Client A	Server	PLAY_EXPLODING_KITTEN	
Server	Client A	E01: Unknown Command	

Client A	Server	PLAY_CARD~Nope
Server	Client A	E07: Card not in hand

## **Commands:**

The difference between basic and advanced commands is that that the advanced commands are needed for the optional features (bonus points features)

#### **Basic Commands Table:**

Sender	Command	Arguments	Description
CLIENT	CONNECT	1: NAME The name you want to be known as a player 2: FLAGS The additional features supported by the client. Multiple features are separated with a comma (, )	Used by the client to let the server know they are there, and which features the client supports.
SERVER	HELLO	1: NAME The name of the player you want to welcome 2: FLAGS The flags which the server supports. Multiple flags are separated by comma (, )	Used by the server as a response to the CONNECT command, acknowledging the message and informing the client about the server functionality.
SERVER	PLAYER_LIST	PLAYER The player who is connected, waiting for a game to begin. Multiple players are separated by comma (,)	Used by the server to let the client know which are all the players connected
CLIENT	ADD_COMPUTER	NO ARGS	Used by the client to add a new computer player to the lobby
CLIENT	REMOVE_COMPUTER	NO ARGS	Used by the client to remove a computer player from the lobby
SERVER	QUEUE	SIZE The amount of players that are connected and waiting for the game to start	Used by the server to let the client know how many players are connected and waiting for a game to begin

CLIENT	REQUEST_GAME	SIZE The amount of players you want to play with.	Used by the client to tell the server to create a game containing the desired players.
SERVER	NEW_GAME	PLAYERLIST The list of participants in the current game in the order that they joined the queue. The players are separated with a comma (,)	Used by the server to confirm the creation of a new game and display the list of players.
SERVER	CURRENT	PLAYER	Used by the server to let the client know whose turn it currently is.
CLIENT	PLAY_CARD	HANDCARD A playing card that the player has in their hand	Used by the client to let the server now that they are putting a card down and which one is it
CLIENT	DRAW_CARD	NO ARGS	Used by the client to inform the server that they want to draw the top card from the deck
SERVER	SHOW_HAND	CARD Multiple cards can be combined with a comma (,)	Used by the server to communicate with the client which cards they have in hand (that can be placed).
SERVER	GAME_OVER	WINNER The player who won the game.	Used by the server to tell the client that the game is finished and the name of the winner.
SERVER	ERROR	EXCEPTION The name of the exception	Used by the server to ask the client for a different input, and display the issue, when the client sends an invalid command.
SERVER	BROADCAST_MOVE	1: PLAYER 2: MOVE	Used by the server to display the last move to the client.
SERVER	PLAYER_OUT	PLAYER	Used by the server to confirm to the client that a given player is no longer a participant in the current game.
SERVER	ASK_FOR_PLAYERNA ME	PLAYERLIST A list of players containing all the players in the game, except the one that played the favor card. Multiple players are separated with a comma (,)	Used by the server to ask a certain player for input when playing a favor card.

CLIENT	RESPOND_PLAYERNA ME	PLAYER NAME	Used by the client to respond to the ASK_FOR_PLAYERNAME command.
SERVER	ASK_FOR_CARDNAME	NO ARGS	Used by the server to ask a certain player for input after selecting another player in the favor case.
CLIENT	RESPOND_CARDNAME	CARD NAME	Used by the client to respond to the ASK_FOR_CARDNAME command.
SERVER	ASK_FOR_INDEX	SIZE OF DECK An integer value representing the size of the deck	Used by the server to ask a certain player for input when reinserting the Exploding Kitten into the deck after being defused.
CLIENT	RESPOND_INDEX	INTEGER An integer value greater than 0 and smaller than the size of the deck	Used by the client to respond to the ASK_FOR_INDEX command.
SERVER	ASK_FORYESORNO	TEXT A String containing a question that has to be responded with "yes" or "no"	Used by the server to ask a certain player for input when deciding if they want to play a nope card.
CLIENT	RESPOND_YESORNO	YES/NO A string value containing either "yes" or "no"	Used by the client to respond to the ASK_FORYESORNO command.

## **Advanced Commands Table:**

Sender	Command	Arguments	Description
SERVER	LOBBY_LIST	LOBBY The available lobby that can be used to start a game. Multiple lobbies are separated by a comma (,)	Used by the server to let the client know which are all the possible lobbies that can be used to start a game
CLIENT	SEND	TEXT	Used by the client to chat with other players.

		The text written by the player in message	
SERVER	MESSAGE	1: PLAYER 2: TEXT The text written by the player in message	Used by the server to relay the message from the player that sent it to the other players in the game.

# Flags (Optional Features):

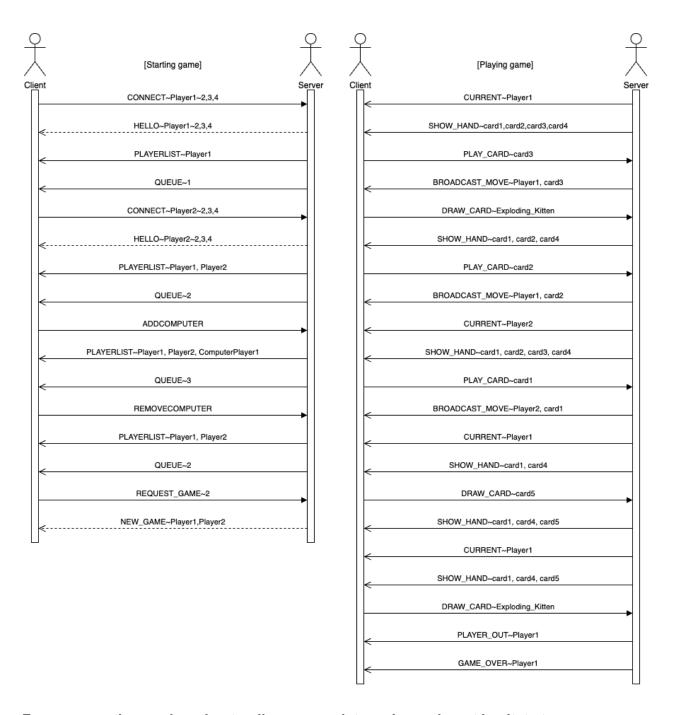
Reference	Feature
0	chat
1	teams
2	multi-games
3	lobby
4	combos
5	extensions
6	GUI

## **Exceptions:**

Exception:	Description:	Source:
E01	Unknown Command	Sending a command that is not in the "Commands" table.
E02	Name already used	A client connecting with the same name as another client who is already

		connected
E03	LOBBY FULL - Too many players in the lobby	Trying to join a lobby which is full
E04	SERVER FULL - Too many players connected on the server	Trying to join a server which is full
E05	Not enough people to start a game	Trying to start a game while the minimum number of players is not met
E06	There are not any computer players connected	Trying to remove a computer player when there are not any connected
E07	Card not in hand	Trying to play a card that is not hand
E08	You are not allowed to input now	A player who tries to send commands to the sever when its not their turn
E09	Flags don't match	Trying to enter an existing server with other flags than those used by the first player who joined it
E10	Exit Program	If a connection is not established     The user indicates to exit the program
E11	Protocol Exception	The protocol not being respected
E12	Server Unavailable Exception	If IO errors occur
E13	Element doesn't exist	When a player tries to select an element that doesn't exist from an array/list/set/map.





For any questions, misunderstandings, or updates, please do not hesitate to message one of the maintainers at +40 757 242 740 or +31 6 87277409.