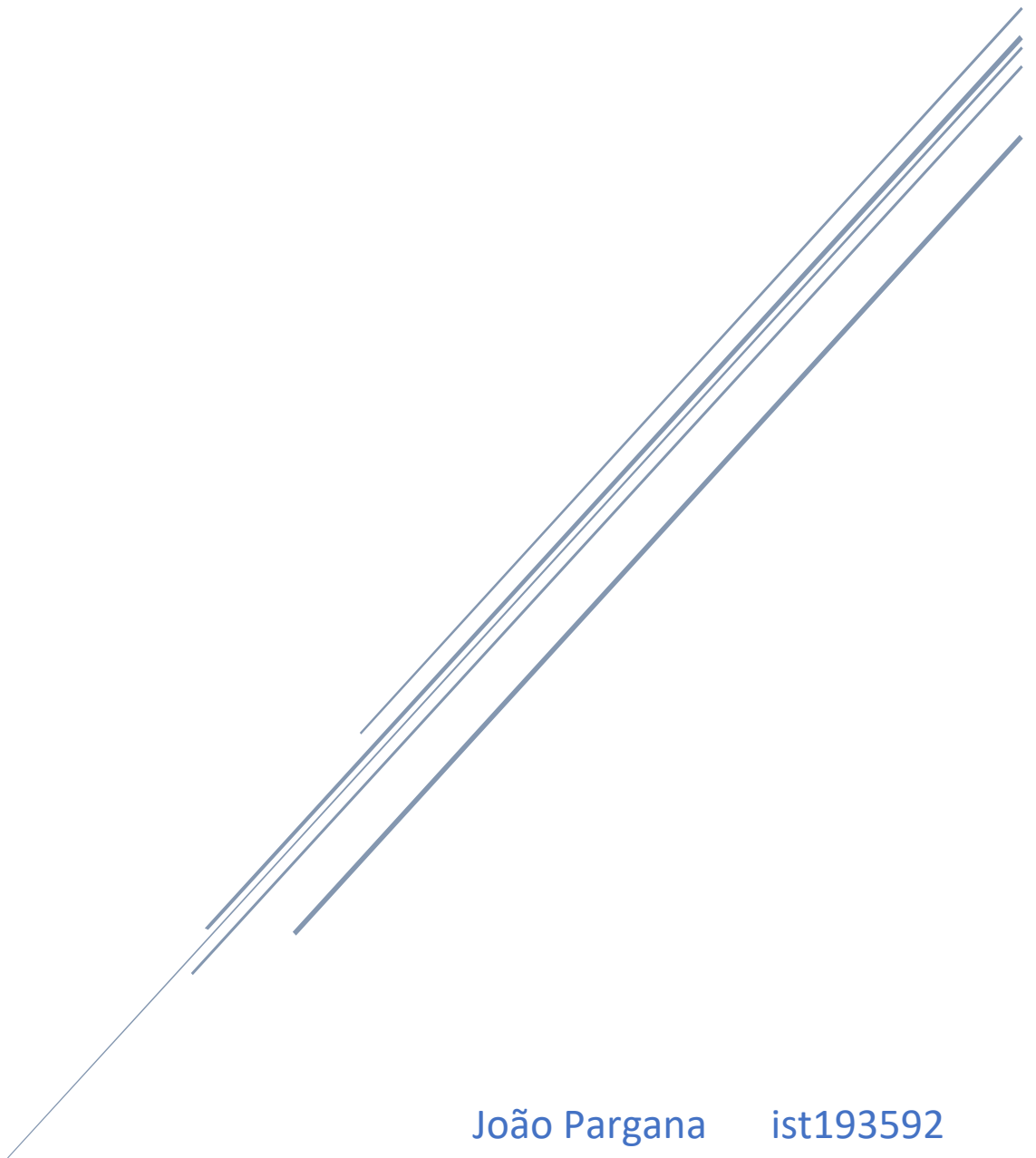


# Projeto GaloOnline

IRC



João Pargana	ist193592
Samuel Barata	ist194230
Afonso Dias	Ist193571

- **Diferenças para a especificação anterior:**

- Comando LOGOUT
- Comando CANCEL
- Diagrama maquina de estados

- **TCP Protocol**

- It ensures that every message is received by the destination
- Easier to check if a player disconnects in the middle of a game
- Better for long distance games

- **Message Format**

- All messages are terminated with '\n'
- All parameters are separated with spaces
- Optional parameters are shown with brackets [type\_of\_parameter]
- Mandatory parameters are shown like <type\_of\_parameter>

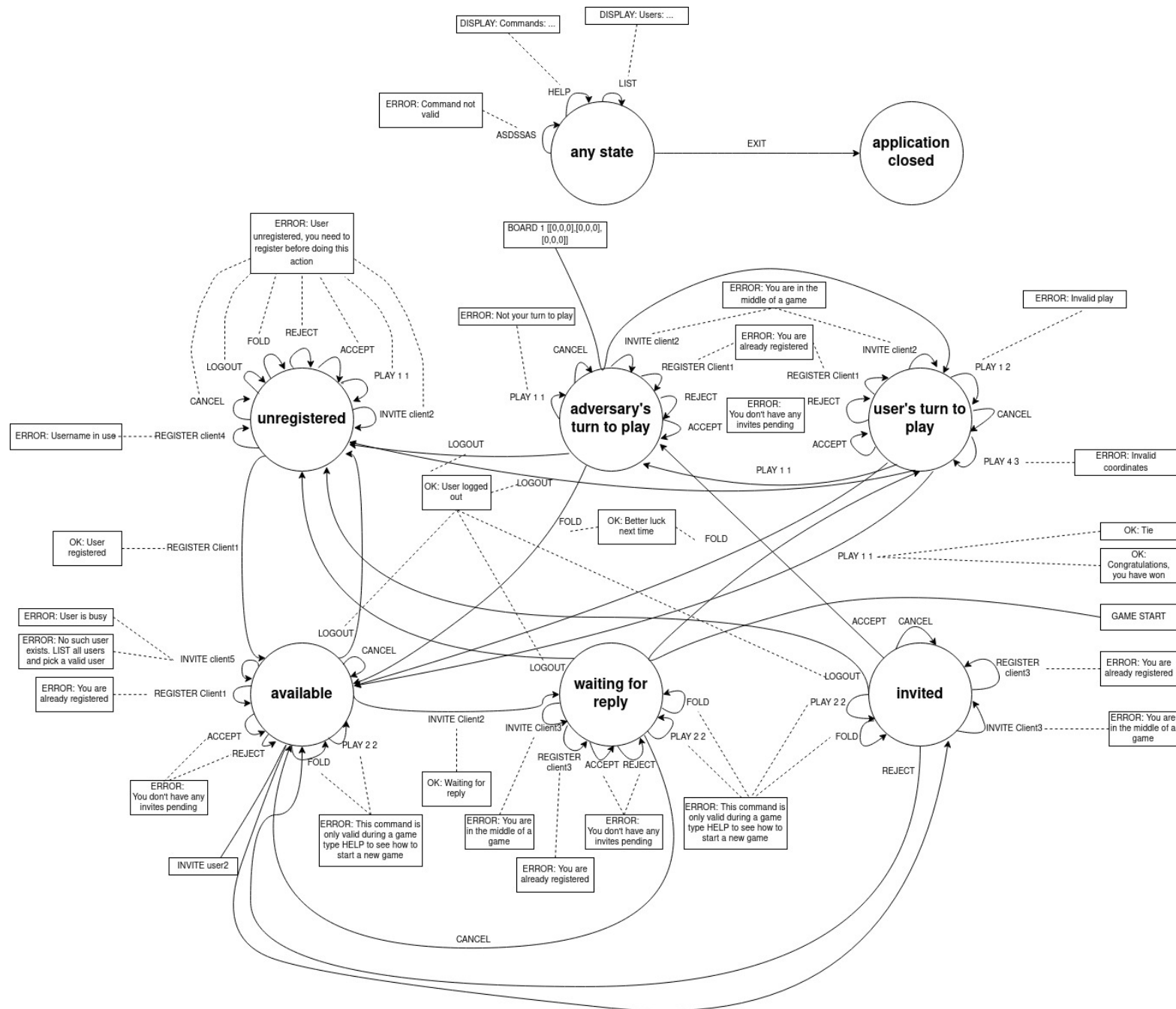
Direction	Message format Brief explanation
Client -> Server	HELP\n Shows available commands
Server -> Client	OK [success_code]\n Success message showing what the server did
Server -> Client	ERROR <error_code>\n Error message explaining the error and possible solutions
Client -> Server	REGISTER <username>\n Register user with <username>
Client -> Server	LIST\n Shows list of users and their status
Client -> Server	INVITE [username]\n Invites <username> for a match or rematch last player
Client -> Server	ACCEPT\n Accepts the game invite
Client -> Server	REJECT\n Rejects the game invite
Client -> Server	PLAY <x> <y>\n Makes a move on the selected square
Client -> Server	FOLD\n Quits the current game
Client -> Server	EXIT\n Exits the application
Server -> Client	BOARD <turn> <[[<>,<>,<>],[<>,<>,<>],[<>,<>,<>]]>\n Sends updated game board to client
Server -> Client	GAME <code>\n Start / win / lose / tie game

Server -> Client	DISPLAY <message>\n Prints <message> for the user
Client -> Server	LOGOUT\n Exits current session
Client -> Server	CANCEL\n Cancels Invitation sent

Error codes	Error Messages
REG_FAIL	Username already in use, pick a different username
NO_USER	No such user exists, LIST all users and pick a valid user
USER_BUSY	User is busy, LIST all users to check their status
INVALID_COOR	Invalid Coordinates, valid range {0,1,2}
INVALID_PLAY	Position {}x{} already has {}
USER_DISCONNECTED	Opponent has left the game, you win
NOT_IN_GAME	This command is only valid during a game type HELP to see how to start a new game
SERVER_OFF	The server will exit, and you'll be disconnected automatically
BAD_REQUEST	Bad Request, type HELP to see available commands
USER_UNKNOWN	User unregistered, you need to register before doing this action
USER_REGISTERED	You are already registered
IMBUSY	You are in the middle of a game
NO_ENV	You don't have any invites pending
NO_TURN	Not your turn to play
BAD_FORMAT	Command is badly formatted, type '?' for more information
	ERROR: Server {} is offline
NO_INV	You haven't sent an invitation yet
YSELF	You've played yourself

Success Codes	Success Messages
REG_OK	User successfully registered
INVETE_OK	Waiting for reply...
INVITE_REC	You've been invited to play by {} ACCEPT   REJECT
REJECT	{} has rejected your request
WAITING_FOR_PLAY	Not your turn to play
WIN	Congratulations, you have won
LOSE	Better luck next time
TIE	Tie
START	Game started against {}
FOLD	{} has dropped out of the game
DISCONNECT	User Logged Out
CANCEL	Invite canceled

# Maquina de estados



[Original Image](#)