

Network Message Design Document

Below is a list of all of our network messages that will be sent over the network in order for our game to run smoothly. Two examples of messages have been provided below for each network message.

Message	Purpose	Format	Examples
JOIN	Client requests to join the server	JOIN	JOIN (First client connects) JOIN (Second client connects)
JOINED	Client sends username and selected color to server	JOINED:<username>,<colorIndex>	JOINED:Jaden,1 JOINED:Marcus,3
SPAWN	Server assigns spawn position to a player	SPAWN:<username>,<colorIndex>,<xPosition>	SPAWN:Jaden,1,600 SPAWN:Marcus,2,400
POS	Sends player position updates	POS:<username>,<x>,<y>	POS:Jaden,520,300 POS:Marcus,640,250
TAGGED	Indicates which player is now IT	TAGGED:<username>	TAGGED:Marcus TAGGED:Jaden
TIME	Updates bomb countdown timer	TIME:<secondsRemaining>	TIME:10 TIME:3
GRACETIME	Countdown before round starts	GRACETIME:<secondsRemaining>	GRACETIME:5 GRACETIME:1
EXPLODE	Player is eliminated	EXPLODE:<username>	EXPLODE:Marcus EXPLODE:Max
MAP	Server selects which map to load	MAP:1 or MAP:2	MAP:1 MAP:2
LOBBY	Updates number of players in lobby	LOBBY:<numberOfPlayers>	LOBBY:2 LOBBY:4
CHAT	Sends a chat message	CHAT:<username>:<message>	CHAT:Jaden:hello everyone CHAT:Marcus:run!!
GAMEOVER	Ends the game and announces winner	GAMEOVER:<username>	GAMEOVER:Jaden GAMEOVER:Max