Client to Server:

JoinGameRequest: Message to request joining the game.

{"messageType": "JoinGameRequest", "playerName": "<NAME>"}

- String <NAME>: The name of the client (player).

UpdateProgressRequest: Message sent by the client to update the current speed, time, and progress.

{"messageType": "UpdateProgressRequest", "playerName": "<NAME>", "wpm": <WPM>, "time": <TIME>, "progress": <PROGRESS> }

- String <NAME>: The name of the client (player).
- int <WPM>: Current words per minute.
- int <TIME>: Time spent in seconds.
- int <PROGRESS>: Current progress percentage (0-100).

StartGameRequest: Message to request starting the game.

{"messageType": "StartGameRequest"}

EndGameRequest: Message sent by the client to indicate that the player has finished typing.

{"messageType": "EndGameRequest", "playerName": "<NAME>"}

- String <NAME>: The name of the client (player).

PlayerLeftRequest: Message sent by the client to indicate that the player has left the game.

{"messageType": "PlayerLeftRequest", "playerName": "<NAME>"}

- String <NAME>: The name of the client (player).

Server to Client:

GameStateNotification: Message broadcasting the current game state.

{"messageType": "GameStateNotification",
    "players": [{"playerName": "<NAME>", "wpm": <WPM>, "time": <TIME>,
"progress": <PROGRESS>}, Other players]}

- String <NAME>: Player name.
- int <WPM>: Current words per minute.
- int <TIME>: Time spent in seconds.
- int <PROGRESS>: Current progress percentage.

PlayerJoinedNotification: Message notifying all clients that a new player has joined.

{"messageType": "PlayerJoinedNotification", "newPlayerName": "<NAME>",
"numPlayers": <NUM_PLAYERS>}

- String <NAME>: Name of the player who just joined the game.
- int <NUM_PLAYERS>: Current number of active players in the game.

AllJoinedNotification: Message notifying all clients that all players have joined and the game is ready to start.

{"messageType": "AllJoinedNotification", "numPlayers": <NUM_PLAYERS>"}

PlayerLeftNotification: Message notifying all clients that a player has left the game.

{"messageType": "PlayerLeftNotification", "playerName": "<NAME>", "numPlayers":
<NUM_PLAYERS>}

- String <NAME>: Name of the player who left the game.
- int <NUM_PLAYERS>: Current number of active players in the game.

GameStartNotification: Message notifying clients that the game has started.

{"messageType": "GameStartNotification", "text": "<TEXT>"}

- String <TEXT>: Text to be typed.

GameEndNotification: Message notifying this client that the game has ended, including final rankings.

{"messageType": "GameEndNotification",
  "results": [{"playerName": "<NAME>", "rank": <RANK>, "wpm": <WPM>, "time":
<TIME>, "progress": <PROGRESS>}, Rankings of other players]}

- String <NAME>: Player name.
- int <RANK>: Player's final rank.
- int <WPM>: Final words per minute.
- int <TIME>: Final time spent in seconds.
- int <PROGRESS>: Final progress percentage.

AllEndedNotification: Message notifying all clients that the game has ended.

{"messageType": "GameEndNotification"}