

CLIENT JOINING A GAME

This sequence diagram starts off with the client connecting to the server, the server asks the player to choose between single player and multiplayer mode.

In the former, the player is asked to choose a valid nickname, then the game can begin.

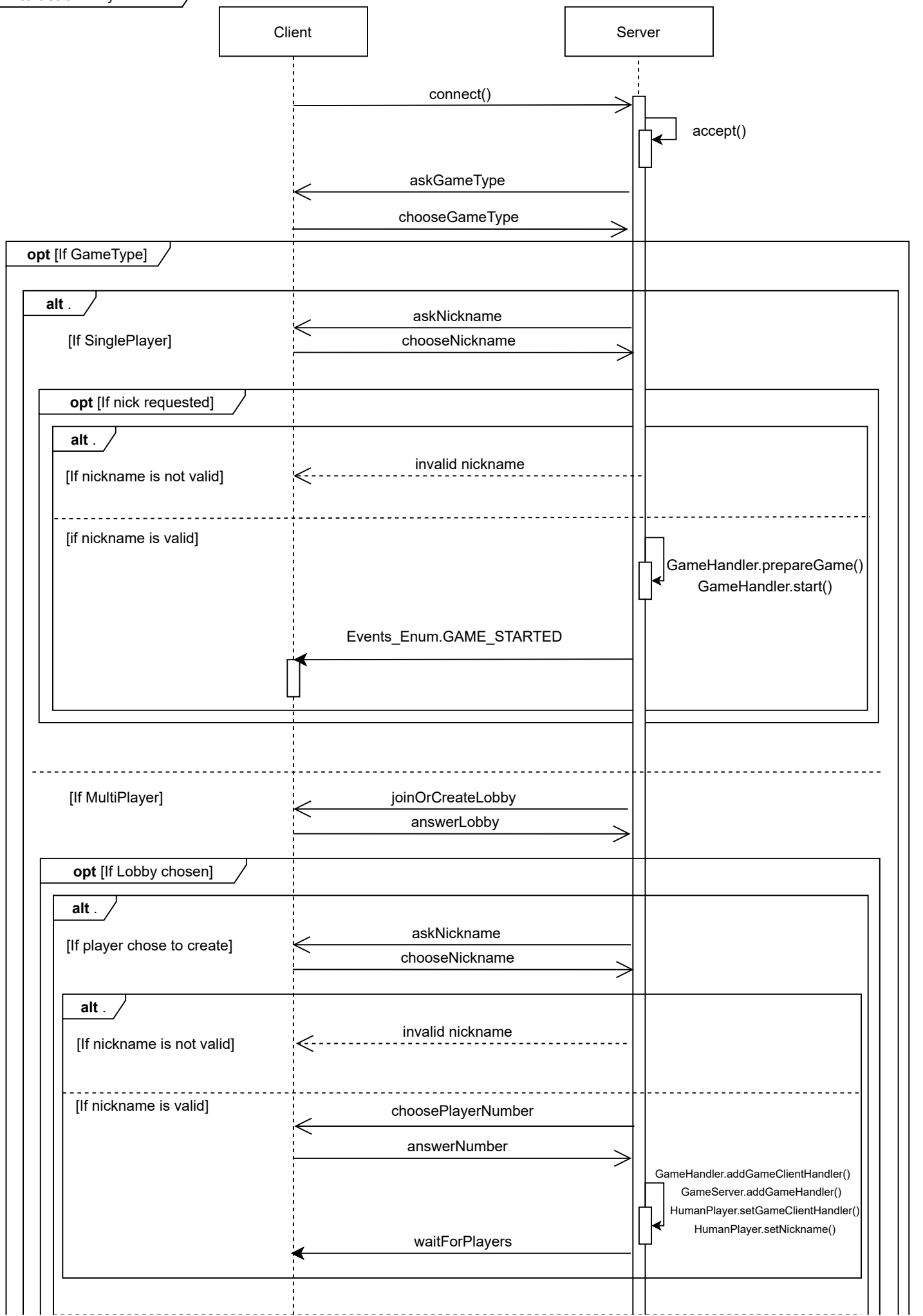
In the latter, we have two different options:

- Creating a match : the player chooses a nickname and the number of players, then the lobby is created and the server waits for other players to join until lobby is full.
- Joining an existing match : the player chooses a match ID from a list of non full lobbies. Player chooses the nickname and joins the room; when the lobby is completely filled, the server starts the game for every participant. In case of zero non-full lobbies the player request becomes a creating match one.

The nickname is checked automatically by the server:

- In a single player match, the nickname must be valid (no empty nicknames).
- In a multiplayer match, the nickname must be both valid (no empty nicknames) and not already taken by another player in the same lobby.
- NB: since we have implemented the multiple games advanced feature and therefore the nickname must be unique for every player of every game, we have implemented another check for both game modes.

interaction PlayerAccess



[If player chose to join]

alt .

[If there are no lobby]

Jump to: create lobby

[If there is at least one
lobby]

askMatchID

sendMatchID

HumanPlayer.setGameClientHandler()

askNickname

chooseNickname

alt

[If nickname is not valid]

invalid nickname

[If nickname is already taken]

nickname taken, choose again

[If nickname is valid]

nickname OK

alt

[If lobby is not full]

waiting for other players

[If lobby is full]

GameHandler.prepareGame()

GameHandler.start()

loop [for every player]

Events_Enum.GAME_STARTED