Eryantis Protocol Documentation

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1 Messages

1.1 askNickname

The server asks the client his nickname

Arguments

This message has no arguments

Possible responses

The client's nickname

1.2 sendNickname

The client's socket sends the client's nickname to the server

Arguments

- nickname: the client's nickname

Possible responses

- ack: if the nickname is legit
- error: if the nickname is not legit, because it's already in use

1.3 ack

This message is sent from the server to the client when a generic message has been acknowledged

Arguments

This message has no arguments

Possible responses

This message has no responses

1.4 error

This message is sent from the server to the client when it occurs an error in the acknowledgement of a generic message

Arguments

This message has no arguments

Possible responses

This message has no responses

1.5 addToLobby

The client's socket is added to the server

Arguments

- IDConnection: the client's socket

Possible responses

- ack
- error

1.6 genericMessage

A generic (textual) message

Arguments

- message: the textual message to send

Possible responses

This message has no responses

1.7 askNumPlayers

The server asks the first player who connects to the server how many players does he want to play with

Arguments

This message has no arguments

Possible responses

- numPlayers: the number of players

1.8 sendNumPlayers

The client answers indicating how many players will be playing the game

Arguments

- numPlayers: how many players will be playing the game

Possible responses

This message has no responses

1.9 askExpertsVariant

The server asks the first player who connects to the server whether he wants to activate the experts' variant or not

Arguments

This message has no arguments

Possible responses

- expertsVariant: a boolean that indicates if the experts' variant is chosen or less

1.10 sendExpertsVariant

The client answers indicating if he wants to activate the experts variant or less

Arguments

- expertsVariant: a boolean that indicates if the experts' variant is chosen or less

Possible responses

This message has no responses

1.11 askAssistantSeed

The server asks a player which deck of assistant cards he wants to pick

Arguments

This message has no arguments

Possible responses

- seed: the chosen assistant seed

1.12 sendAssistantSeed

The client answers indicating which assistant seed wants to pick

Arguments

- chosenAssistantSeed: the chosen assistant seed

Possible responses

This message has no responses

1.13 askAssistantCard

The server asks a player which assistant card he wants to play

Arguments

This message has no arguments

Possible responses

- assistantCard: the chosen assistant card

1.14 sendAssistantCard

The client answers indicating which assistant cards wants to activate

Arguments

- chosenAssistantCard: the chosen assistant card

Possible responses

This message has no responses

1.15 askPlayCharacterCard

The server asks a player if he wants to activate one character card

Arguments

This message has no arguments

Possible responses

- chosenCharacterCard: the chosen character card

1.16 sendPlayCharacterCard

The client answers indicating which character cards wants to activate

Arguments

- chosenCharacterCard: the chosen character card

Possible responses

This message has no responses

1.17 askMoveMotherNature

Server asks to the current player to move Mother Nature

Arguments

This message has no arguments

Possible responses

- steps: the number of steps that mother nature will take

1.18 sendMoveMotherNature

The current player chooses the steps that mother nature will take

Arguments

- steps: the number of steps that mother nature will take

Possible responses

- ack: if the chosen number is legit
- error: if the chosen number is forbidden

1.19 askMoveStud

Message sent by the server asking the player where he wants to move his students

Arguments

This message has no arguments

Possible responses

- answer: the player's choice

1.20 askMoveStudToIsland

Message sent by the server asking the player to move a player to an island

Arguments

This message has no arguments

Possible responses

- color: the student's color
- index: the island's index

1.21 askMoveStudToDining

Message sent by the server asking the player to move a player to his dining room

Arguments

This message has no arguments

Possible responses

- color: the student's color

1.22 askCloudTile

Message sent by the server asking the player to pick a cloud tile, sent after the action phase, move 2

Arguments

This message has no arguments

Possible responses

- index: the chosen cloud tile

1.23 sendCloudTile

The picked cloud tile by a certain player

Arguments

- index: the chosen cloud tile's index

Possible responses

- ack: if the chosen cloud tile is legit
- error: if the chosen cloud tile is forbidden

1.24 showWinMessage

Server announces to the winning player he has won the match

Arguments

- Winner: indicates if the player won the match

Possible responses

This message has no responses

1.25 showLoseMessage

Server announces to the losing players they've lost and who won the match

Arguments

- Winner: indicates if the player won the match

Possible responses

This message has no responses

1.26 showGameBoard

Server shows the actual gameboard

Arguments

- gameBoards: the players' game boards

Possible responses

This message has no responses

1.27 closeSocket

Each client asks to close the connection with the match server once the game is finished

Arguments

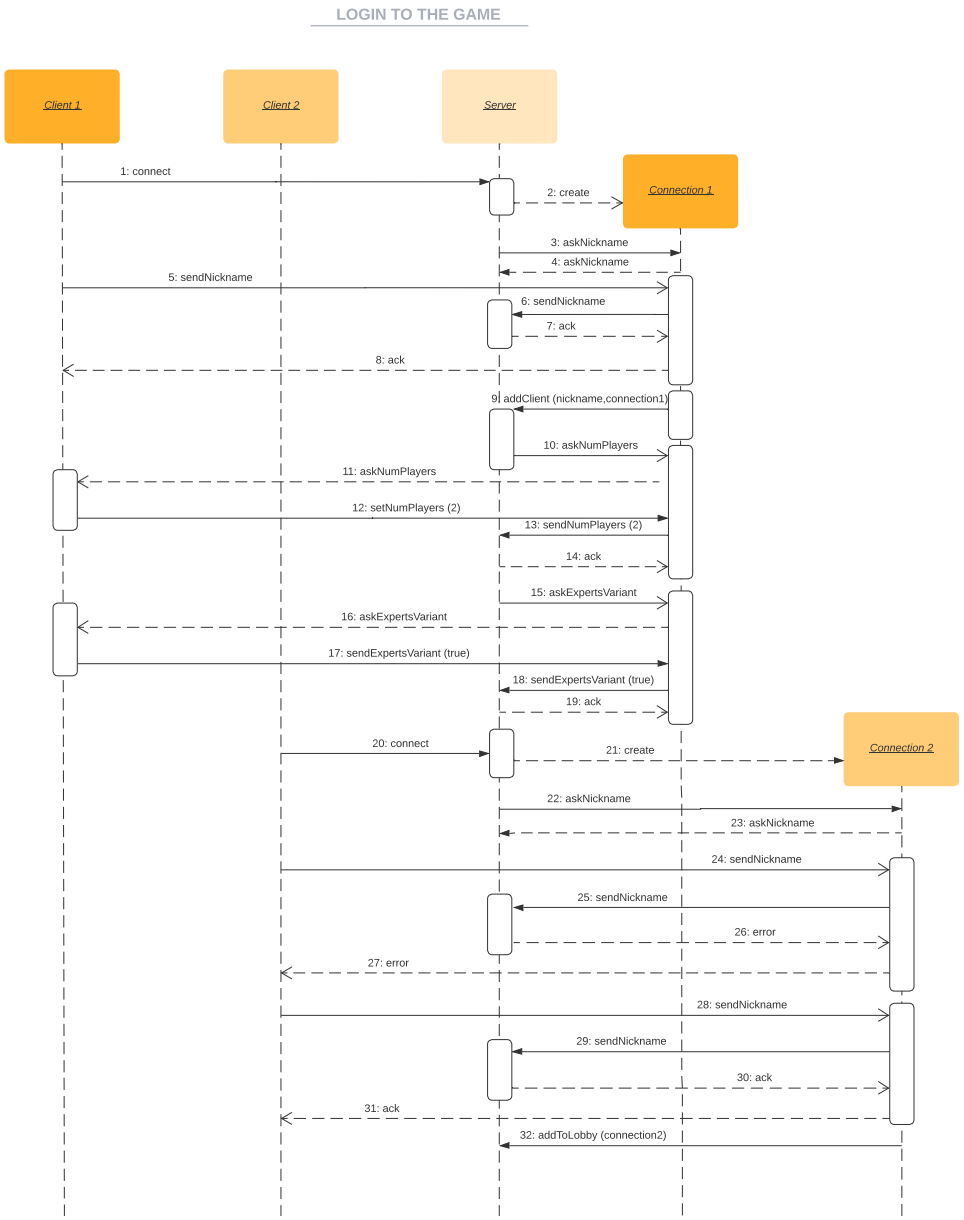
This message has no arguments

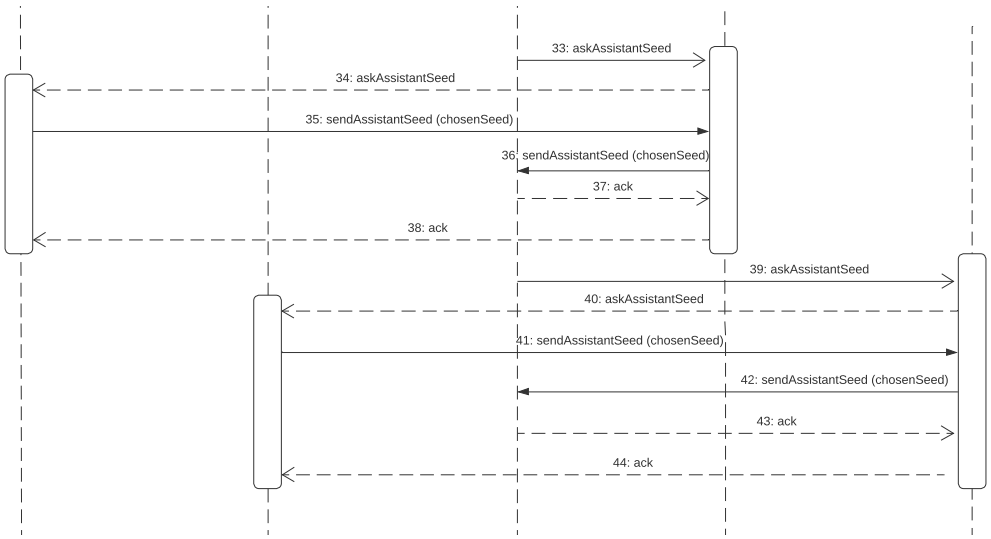
Possible responses

- ack
- error

2 Scenarios

2.1 Login to the game





The first player connects to the server and creates a socket, then he is asked to enter his nickname, if the nickname is valid he is added to the lobby.

Being the first player he is also asked with how many players does he want to play with (in this example above he chooses a total of 2 players).

After that he is also asked if he wants to play with the experts variant activated or not (in this example he chooses to activate it).

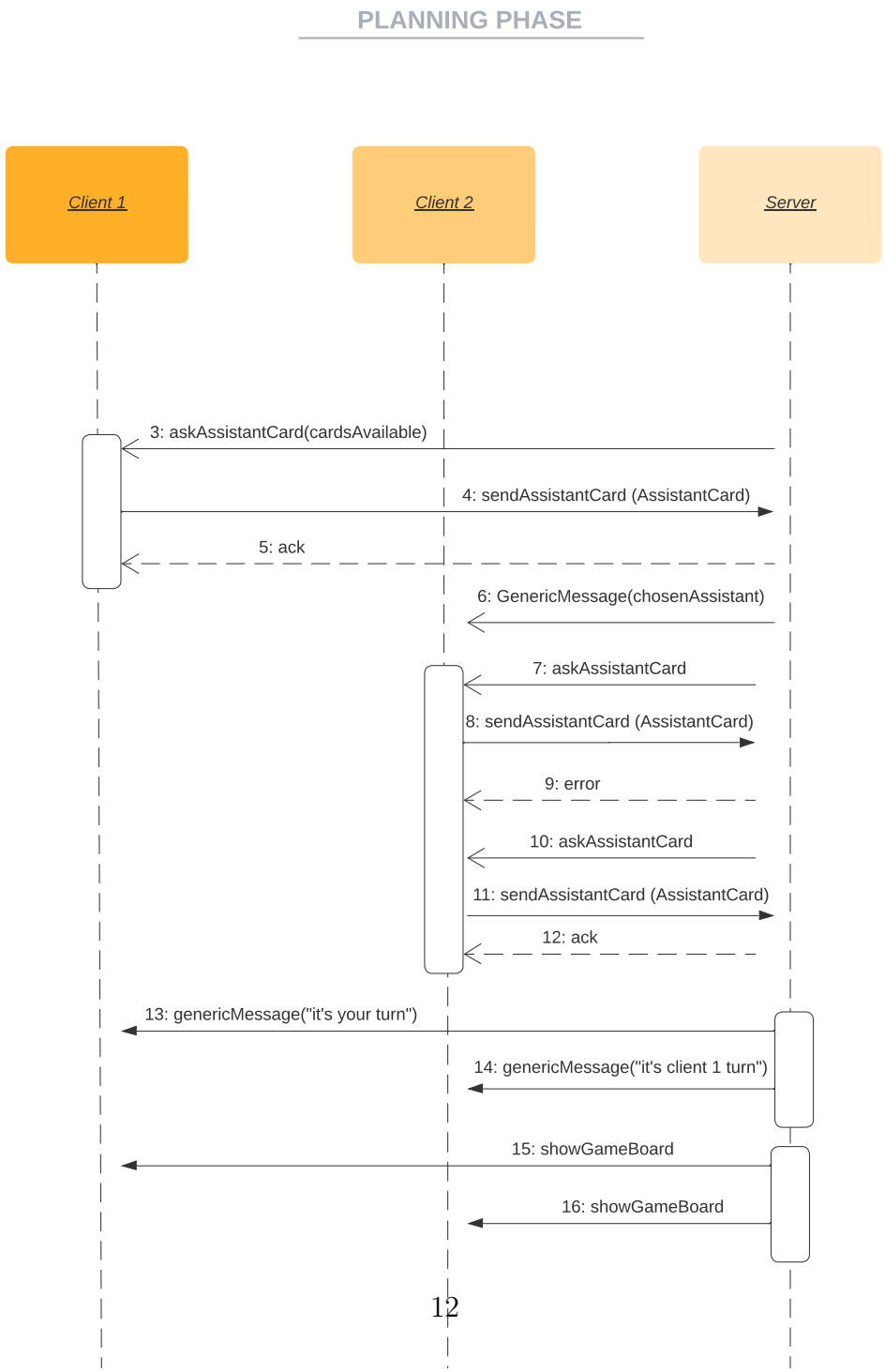
Now the server waits till another player connects and creates his socket. As the first player he has to enter his nickname which is not valid at the first try, because it's the same as the first one, so he has to retry. As soon as he enters a valid nickname he is added too to the lobby.

Since the number of players chosen by the first player (2) is reached, the game can start.

The server asks each player to choose his deck of assistant cards (the wizard) and as soon as the choices are both valid all the players' views are updated with the initial screen.

We have chosen that at the first round the first player to play is supposed to be the one who first has connected to the server, by default (in the example the "Client 1").

2.2 Planning phase

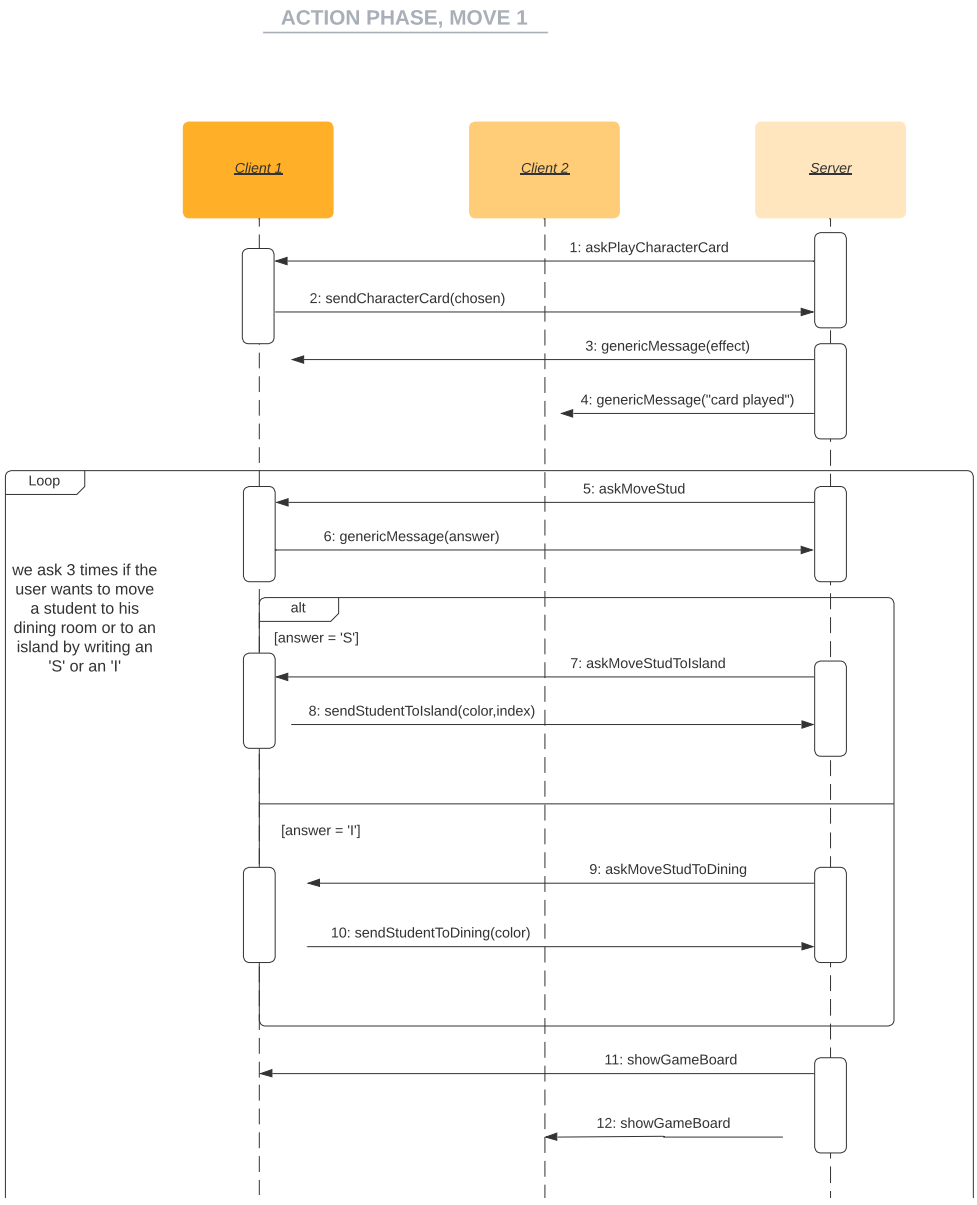


Then each player needs to pick an assistant card, starting from the one who played the lowest at the round before.

An assistant card is valid only if it isn't already played by other players, so if this case occurs a "error" message is returned to the player, and he must choose another assistant card.

After all the players have picked their (valid) assistant cards there will be methods invoked in the server to determine who is the first player (in this example the first player with "ID1") and he will start his action phase.

2.3 Action phase, move 1



In this phase before all the server asks to a client if he wants to activate a character card, if the player's choice is affirmative the server asks which card does he want to activate (and in some cases other things) and all the players

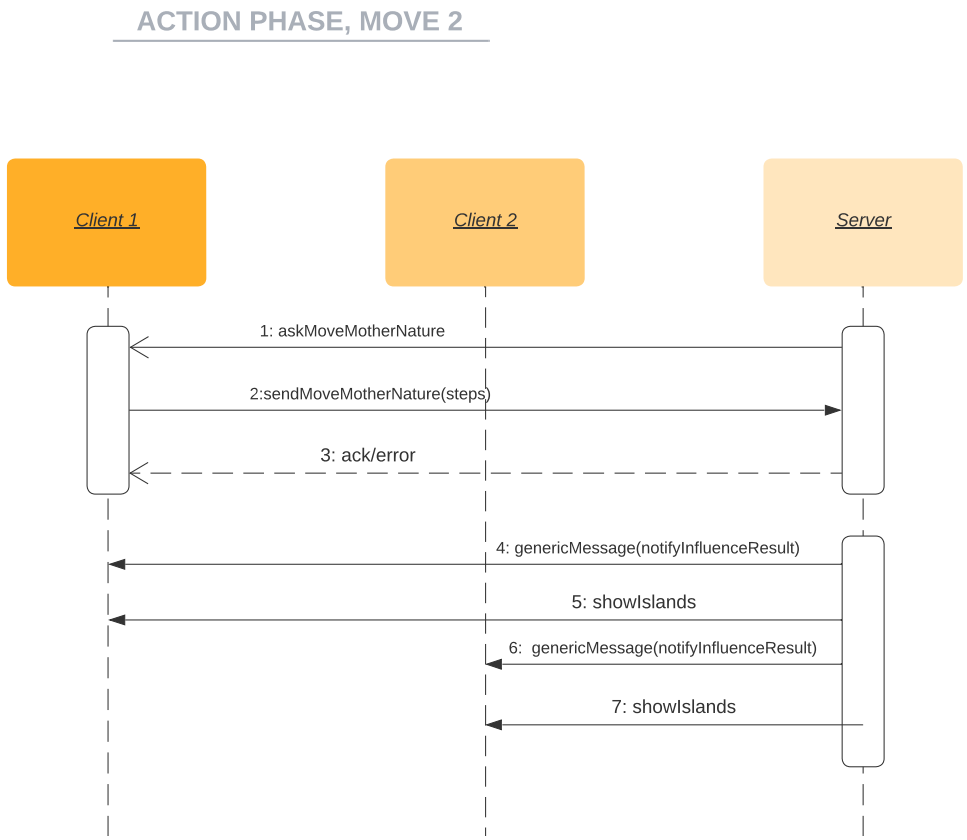
are notified.

Then the server asks for 3 times where the player wants to move his students, in his dining room or on an island:

- dining room: the client has only to choose a student's color
- island: the client has to choose a student's color and the index of the island on which the student will be moved

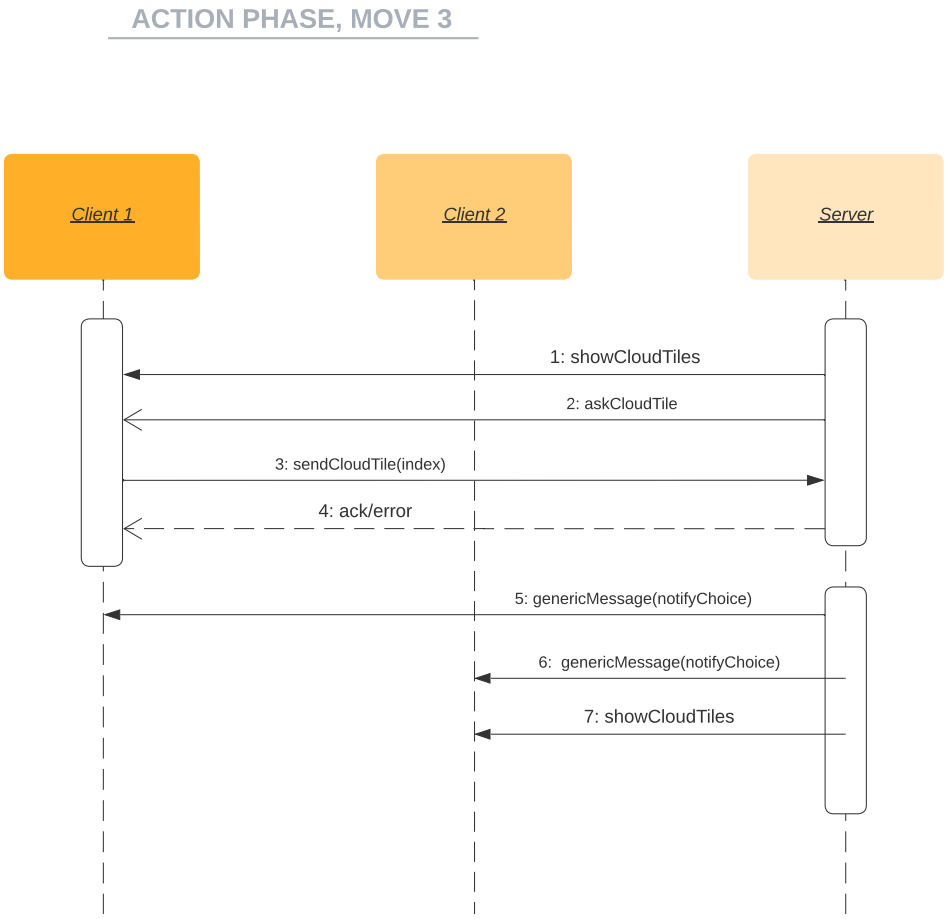
After each movement the server shows the updated game board or islands to all the players in the game.

2.4 Action phase, move 2



In this phase the player chooses how many steps mother nature has to make, if the choice is valid (number of steps more than 0 and less than the maximum steps indicated in the assistant card in use) we compute the influence on the island where mother nature arrives, we notify with a message what is the result of the computation (the player with the most influence) and so all the players' views are updated with the updated set of islands.

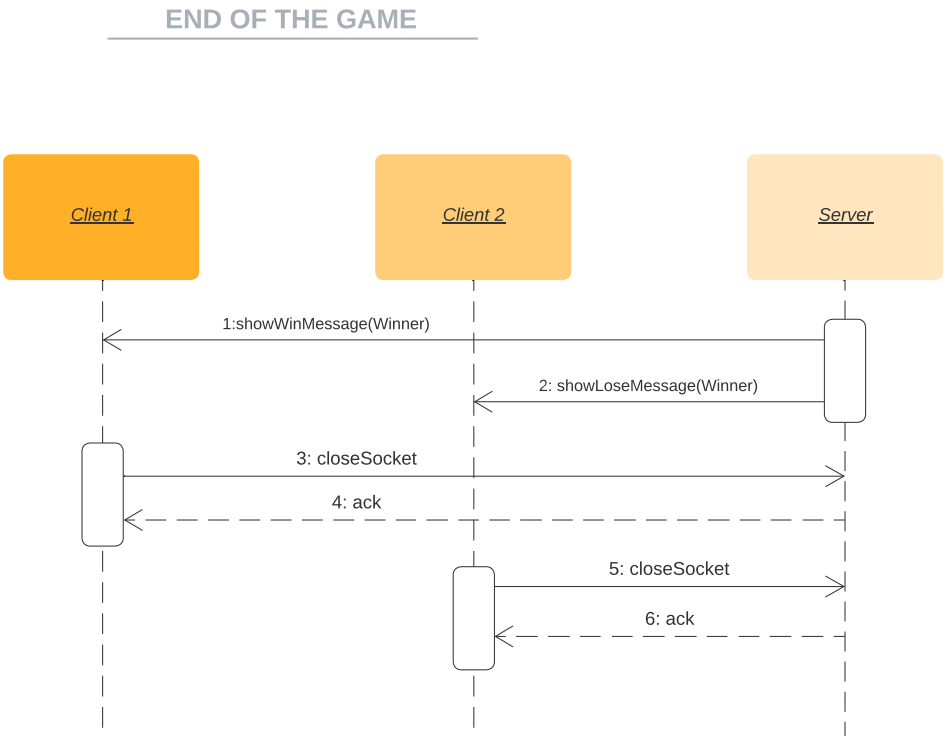
2.5 Action phase, move 3



In this phase the server asks a player to choose a cloud tile, if the player's choice is valid (the cloud tile's tile exists and it wasn't already picked by other players) his school board is filled, the chosen cloud tile is emptied and

all the players' views are updated.

2.6 End of the game



When the game ends each player is notified with a generic message indicating who is the winner and after this all the clients' sockets are closed and disconnected.