COMMUNICATION PROTOCOL

COMMUNICATION START + WAITING IN LOBBY

The first client that connects to the server will receive selection messages for the number of players (NumberofPlayerSelectionMessage) of the game (2/3) and the game mode (GamemodeSelectionMessage) (easy / expert) in addition to its nickname (NicknameSelectionMessage); the subsequent ones will have to enter only the nickname and will be automatically added to the lobby created by the first player after being notified about the type of game they have been added to (PlayersNModeMessage), waiting until the last client needed for the start of the game is connected .

MATCH CREATION

When the game is created, a message is sent that notifies the players of the start of the game (GameStartsMessage).

Immediately afterwards, a message is also sent containing the initial game state (EriantysUpdateMessage) necessary for the correct printing of all interface information.

CLASSIC TURN IN ROUND

Planning phase: At the beginning of the turn the assistant cards are printed and the players are asked to choose the one they want to play (AssistantCardSelectionMessage). Then the order of play for the action phase is established, which is sent to the players.

Action phase: the player on duty is shown his board (PrintBoardMessage) (in the CLI case, this is always visible in the GUI) and the color of the student he intends to move is asked (ColorSelectionMessage), then the destination is also asked (StudentDestinationSelectionMessage) (hall / island) and possibly the number of the island (IslandSelectionMessage); for 3 or 4 times depending on the game mode.

At this point, you are asked how much you want to move mother nature (MNStepsSelectionMessage) and then the influence is automatically calculated and the new control of the island is updated, notifying the clients of the changes.

At the end of the turn, the cloud tiles are shown and you are asked to choose one to fill your entrance (CloudSelectionMessage).

Each time the game state changes, clients are notified with an UpdateMessage.

CHARACTER CARDS

In the case of games in expert mode, the use of character cards is envisaged; for these there are the appropriate commands /play character card and /print character cards which respectively play (CharacterCardSelectionMessage) and print the cards present in a specific game (PrintCharacterCards).

DISCONNECTIONS

When a client decides to disconnect it uses the "/quit" command to which the server responds with a DisconnectionMessage before closing the socket to that client and ending the game (GameAbortedMessage).

Similarly, when a client loses the connection it throws an IOException that is handled on the server side with the closing of the socket towards that client and the subsequent notification towards the other players (GameAbortedMessage); the game also ends in this case.