Eriantys Protocol Documentation

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Group 46

Messages

(Server) PlayerHandshake() → (Client) GetConnection() – SendInfo()

Server awaits the client to connect and, after it connects, client sends to the server all the info about the player and the game

(Server) InsertPlayerIntoLobby() → (Client) GetLobbyStatus()

Server communicates to the client the status of the lobby

(Server) PhaseChange(phaseName) → (Client) GetPhase()

Server communicates to the client the phase of the game about to start

Arguments

- phaseName: the name of the new phase that will start soon

(Server) GetChosenAssistantCard(cards) → (Client) GetPossibleCards() – SendCard(card)

Server asks to the client the AssistantCard chosen by the player as it sends it the ArrayList of card where the player can choose it

Arguments

- cards: the ArrayList of AssistantCard from where the player choose the new card
- card: the card selected by the player

(Server) GetMovedStudentColor() → (Client) SendColor(color)

Server asks to the client the color of the student moved by the player

Arguments

- color: the color of the moved student

(Server) GetMovedStudentLocation() → (Client) SendLocation(location)

Server asks to the client the location of the student moved by the player

Arguments

- location: the new place of the moved student

(Server) GetMNPosition() → (Client) GetPossibleIslands() – SendIsland(location)

Server asks to the client the new position of MotherNature as it sends it the ArrayList of possible islands where MN can be moved on

Arguments

- location: the new place of MN

(Server) SendTowerColor(color) → (Client) GetNewOwner()

Server communicates to the client the new owner of the island where MN is on

Arguments

- color: the color of the player's towers

(Server) GetChosenCloud(clouds) → (Client) GetPossibleClouds() – SendCloud(cloud)

Server asks to the client the cloud chosen by the player as it sends it the ArrayList of possible clouds where the player can choose from

Arguments

- clouds: the ArrayList of clouds to choose from
- cloud: the cloud choose by the player

(Server) NotifyVictory(username) → (Client) GetWinner()

Server communicates to the client the username of the player that has won the game

Arguments

- username: the username of the winner of the game

Scenarios

Client connection to Server

1. Server awaits for a connection on his serverSocket
2. Client connects to the server
3. Server sends a message to initialize the connection with the client
4. Client sends back all the info of the player and the game he wants to join in
5. Once server gets the client's choices, it will find a suitable lobby for the player
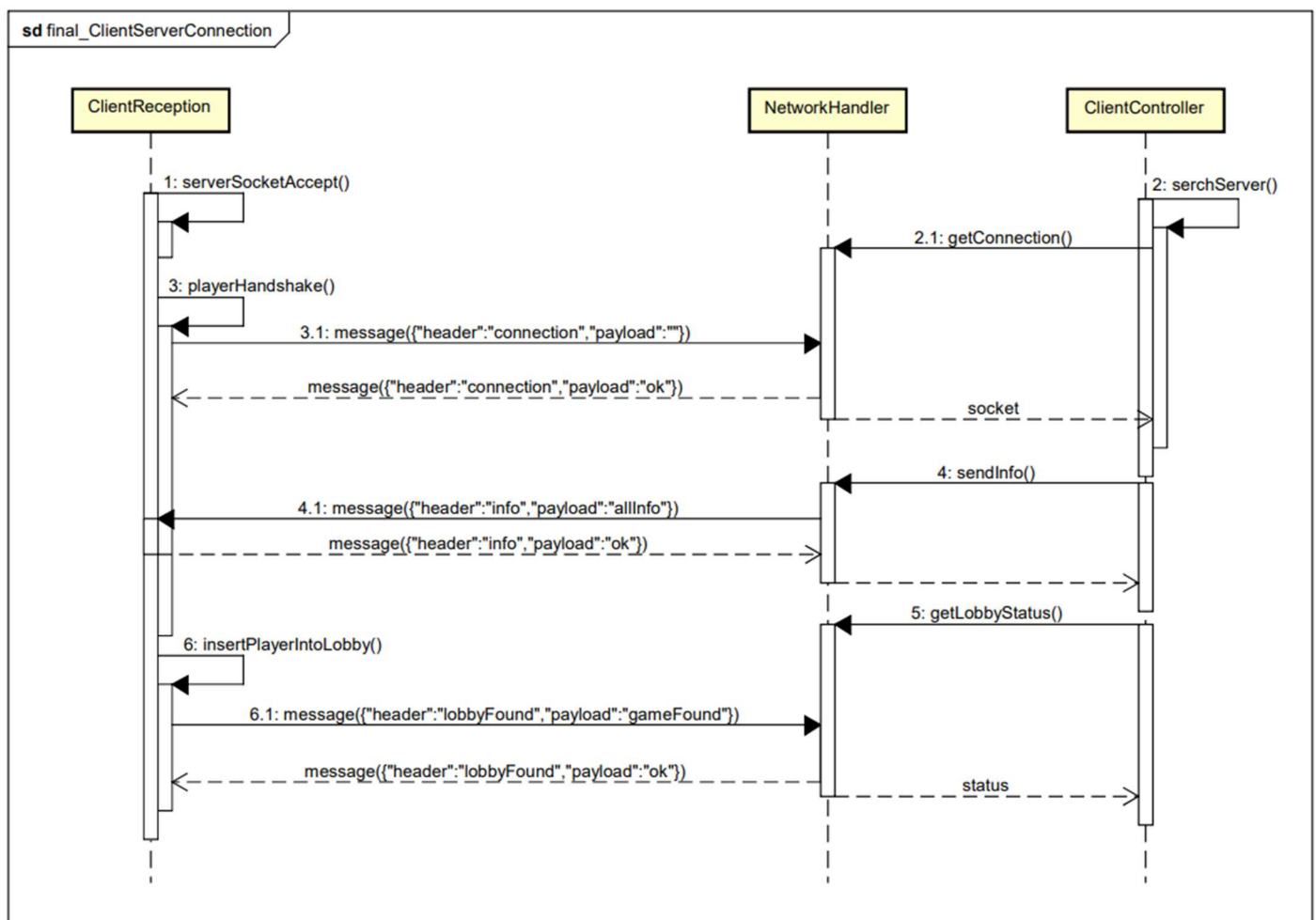
Planning Phase

1. Server sends a message notifying the client that a phase (PlanningPhase) is about to start
2. Server asks to the currentPlayer a card choosen from the ArrayList of possible choices that it sends to the client
3. **Client receives the ArrayList of choices and then, when the player chooses the new AssistantCard, it sends to the server the choosen card**
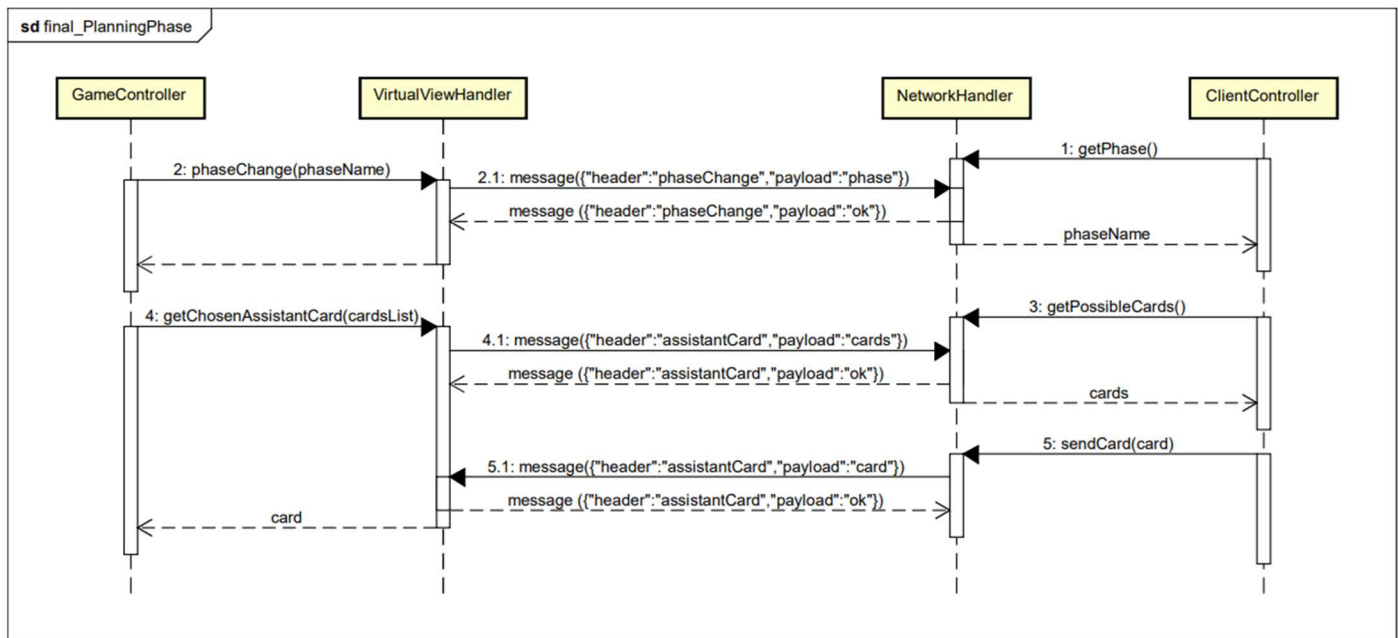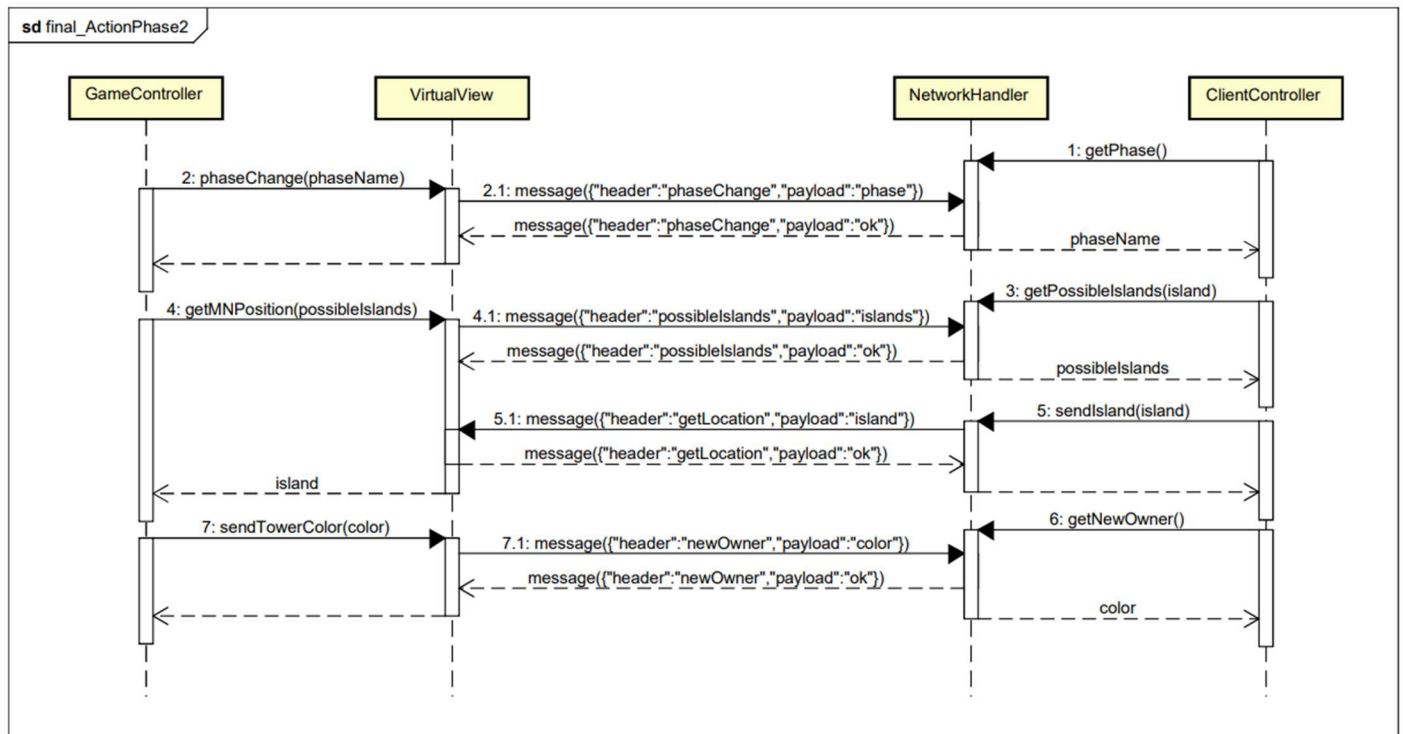

Action Phase 1: Students Movement

1. Server sends a message notifying the client that a phase (ActionPhase1) is about to start
2. Server asks to the currentPlayer the color of the student moved by the player
3. Client sends back the color of the moved student
4. Server asks to the currentPlayer the place of the moved student
5. Client sends back the location of the moved student
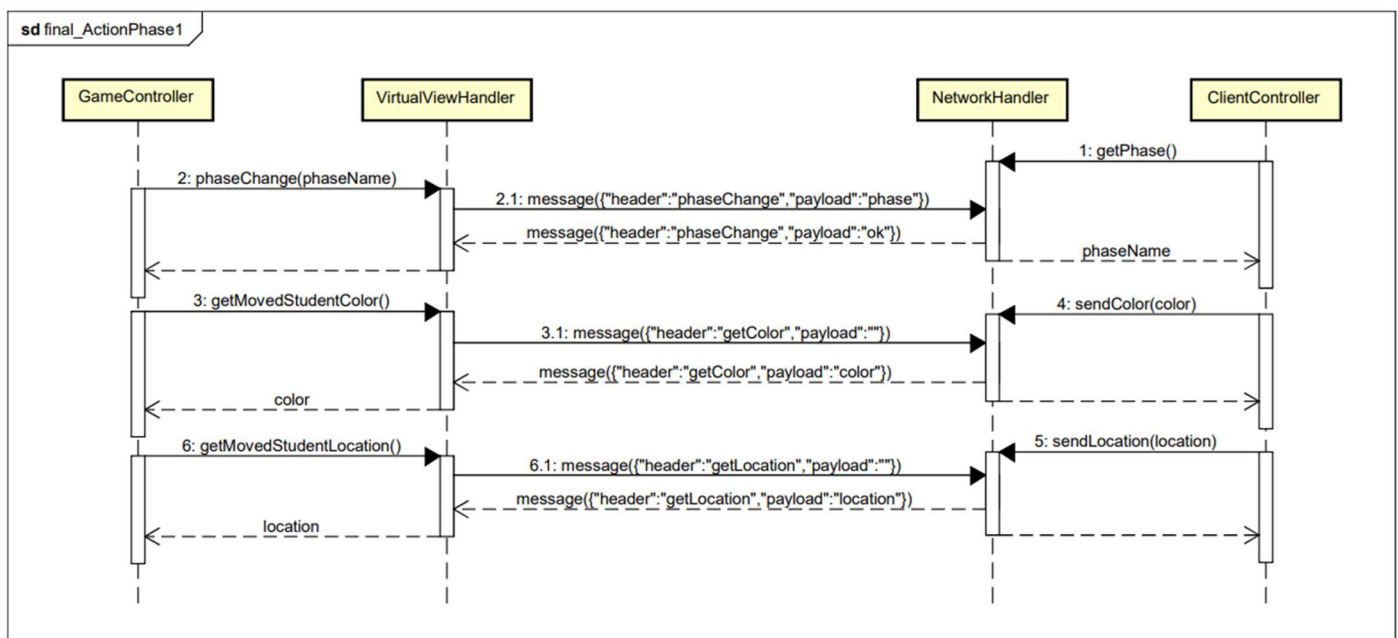
Action Phase 2: Mother Nature Movement and Conquest of an Island

1. Server sends a message notifying the client that a phase (ActionPhase2) is about to start
2. Server asks to the client the new position of MN while it sends it the ArrayList of island where MN can be moved on
3. Client receives the possible choices and then, when the player chooses the new island to move on MN, it sends back the new location
4. Server receives the new location and, after a call to a model's function, it sends to the client the color of the tower of the new owner

Action Phase 3: Choice of the Cloud

1. Server sends a message notifying the client that a phase (ActionPhase3) is about to start
2. Server asks to the client the cloud choosen by the player as it sends it the ArrayList of clouds where the player can choose from
3. Client receives the possible choices and, when the player chooses the cloud, it sends back the chosen cloud
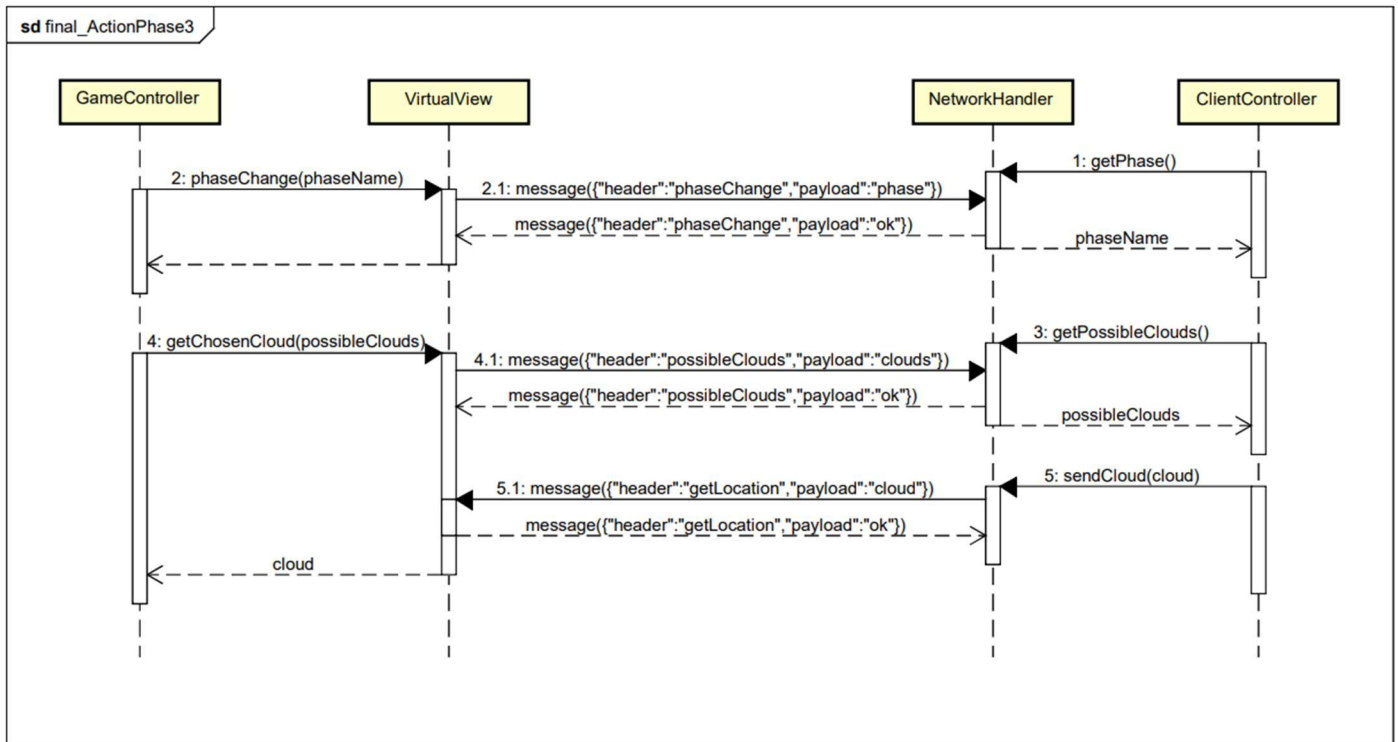
End of the Game

1. Server check if there is a winner: if the result is true, it communicates to all clients to enter a new phase (named WinningPhase)
2. Then the server sends to all clients the username of the winner to be displayed on the View