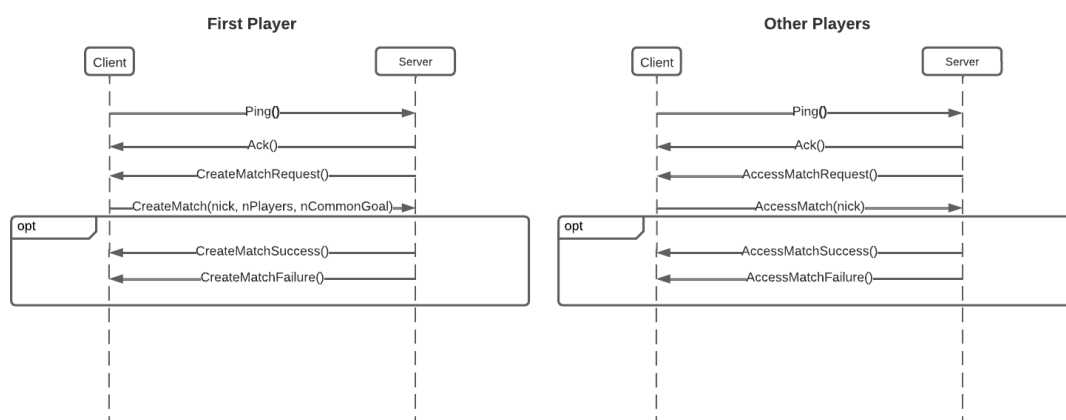# My Shelfie Protocol Documentation

Marra, Gollo, Mariotti, Foresti

Group 42

## Messages



## 1.1 Match creation messages

In this phase the client tries to establish a connection with the server and create a match, if a match already exists the client tries to join it.

## 1.1.1 Ping()

The Ping message is used to inform the Server of the effective presence of the client.

## 1.1.2 Ack()

Ack messages are always sent in response to Ping messages.

## 1.1.3 CreateMatchRequest()

Message sent by the server to inform the client of his availability for match creation.

### 1.1.4 CreateMatch(nick, n Players, n commonGoals)

Message sent by the client to request a match creation, it also includes the following information: the nickname of the client, the number of expected players and the number of common goals.

### 1.1.5 CreateMatchSuccess()

Message sent by the server to the client if the creation of the match is completed successfully

### 1.1.6 CreateMatchFailure()

Message sent by the server to the client if the creation of the match isn't completed successfully

### 1.2.1 AccessMatchRequest()

This message is sent to the client in the situation where a match already exists.
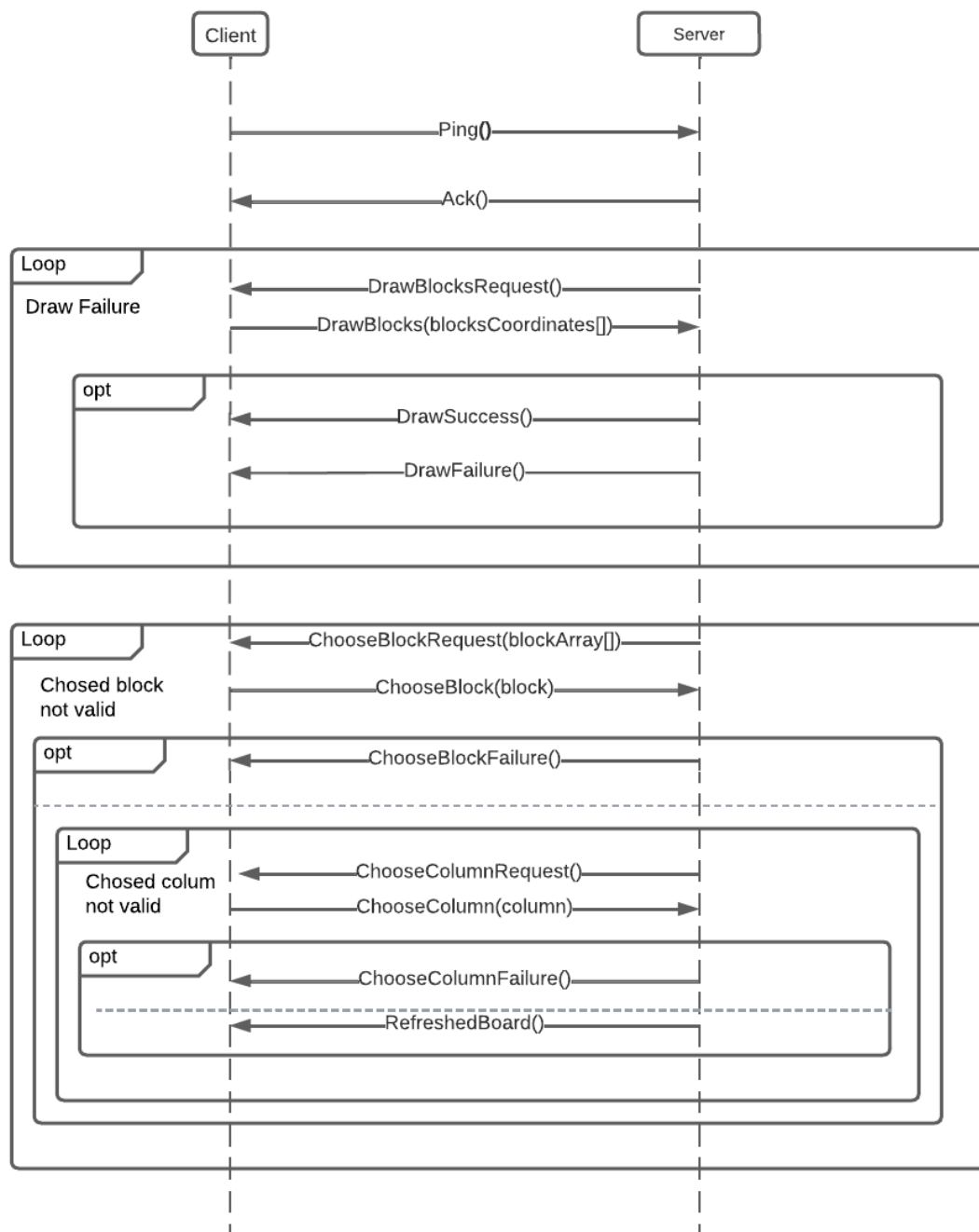
### 1.2.2 AccessMatch(nick)

The client sends this message to join an already existing match,it includes the nickname of the client.

### 1.2.3 AccessMatchSuccess()

Message sent by the server to the client if the request to join is accepted.

### 1.2.4 AccessMatchFailure()

Message sent by the server to the client if the request to join isn't accepted.

**Client**      **Server**

Ping()

Ack()

**Loop**
Draw Failure

DrawBlocksRequest()

DrawBlocks(blocksCoordinates[])

**opt**

DrawSuccess()

DrawFailure()

**Loop**
Chosed block not valid

ChooseBlockRequest(blockArray[])

ChooseBlock(block)

**opt**

ChooseBlockFailure()

**Loop**
Chosed colum not valid

ChooseColumnRequest()

ChooseColumn(column)

**opt**

ChooseColumnFailure()

RefreshedBoard()

# 2 Draw Block and add to Library.

In this step, the player chooses which squares to draw from the board and places them in their preferred order in the library
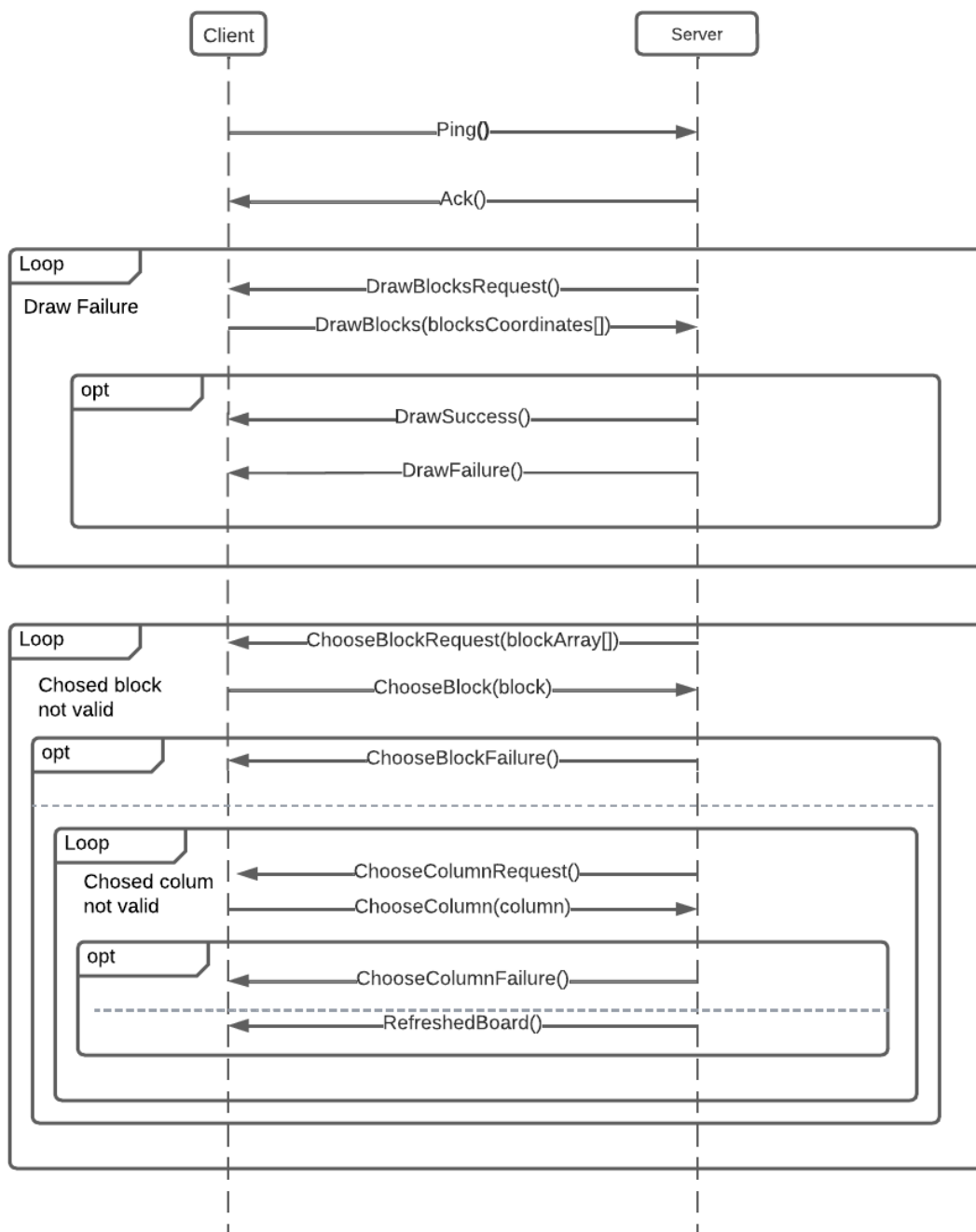
## 2.3 DrawBlocksRequest()

Sends the player a request to choose which Objects they would like to draw from the game board that was already sent to the screen earlier

## 2.4 DrawBlocks(blocksCoordinates[])

The player chooses the blocks to be drawn and communicates them through their corresponding coordinates, stored in an array

## 2.5 DrawSuccess()

If the boxes the player has selected reflect the rules, then the server communicates the success of the draw

## 2.6 DrawFailure()

If the boxes cannot be drawn, then the player is notified of the failure and the DrawBlocksRequest() command is returned

## 2.7 ChooseBlockRequest(blockArray[]).

Asks player which of the drawn blocks to insert

## 2.8 ChooseBlock(block)

Returns to the Server the chosen block to be inserted into the library

## 2.9 ChooseBlockFailure()

Tells the player that the choice they made is invalid and to try again

## 2.10 ChooseColumnRequest()

Asks the player in which column to insert the previously chosen block

## 2.11 ChooseColumn(column).

Returns to the Server the column in which to insert the block

## 2.12 ChooseColumnFailure()

Tells the player that the choice they made is invalid and to try again

## 2.13 RefreshedBoard()

Successfully draws tiles, the board is refreshed for everyone

# 3 Common Goal completed

In this step one of the players complete a common goal. The scheme is divide in two cases : the case in which the client is the player that has completed the common goal, and the case in which the client is another player.
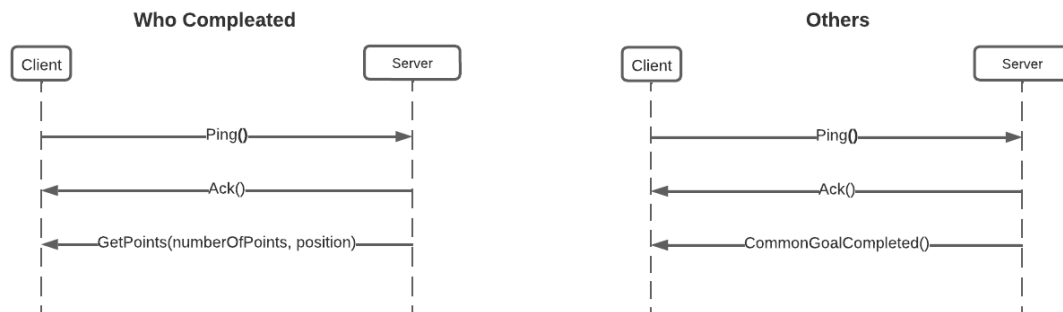


## 3.1.1 Ping()

The Ping message is used to inform the Server of the effective presence of the client.

## 3.1.2 Ack()

Ack messages are always sent in response to Ping messages.

## 3.1.3 GetPoints(numberofPoints,position)

The server tells to the player the number of points that he earns thanks the completation of the common goal.

## 3.2.1 Ping()

The Ping message is used to inform the Server of the effective presence of the client.

## 3.2.2 Ack()

Ack messages are always sent in response to Ping messages.

## 3.2.3 CommonGoalComplete()

The server tells to all the others players that the one player has completed a common goal.