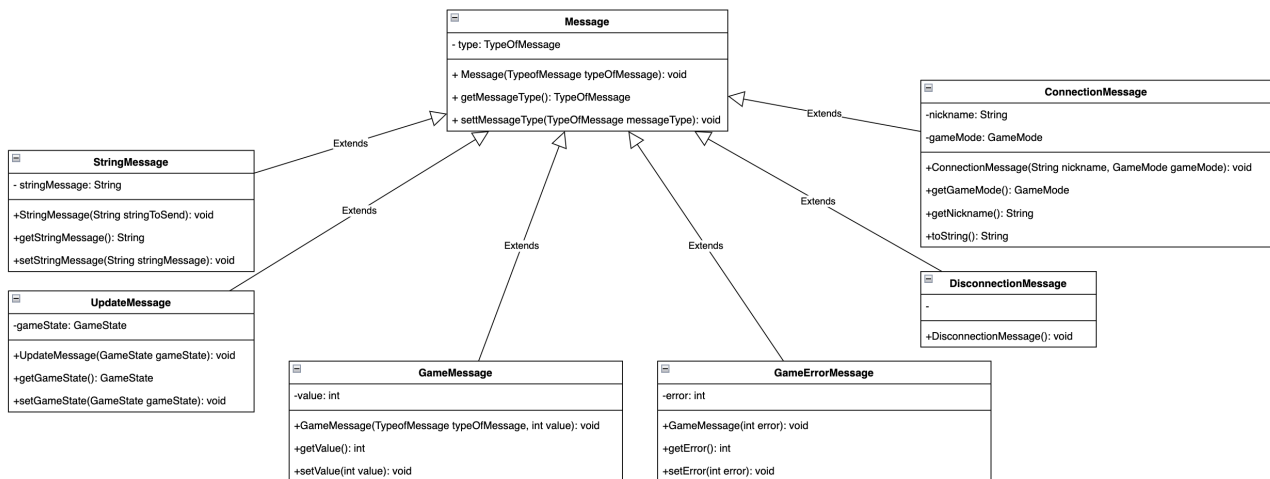# Eryantis Protocol Documentation

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Gruppo 22

Messages

Message

General message from which each kind of message inherit. It is used when the only need is to specity the TypeOfMessage without further information.

Arguments

- TypeOfMessage: enum that describes the content of message. It can be Connection, AssistantCard, StudentColour, StudentPosition, MoveMotherNature, CharacterCard, CloudChoice, IslandChoice, Update, EndGame, Error, StringMessage, Async, Number;

Possible Responses

- Error: ErrorMessage with status code to display the reason of error.

ConnectionMessage

Message sent from Client to Server when the former wants to establish a connection to create a game session.

Arguments

- TypeOfMessage: Connection;
- Nickname: specifies the name of the player who wants to establish a connection;
- GameMode: specifies the game mode chosen;

Possible Responses

- 0: the nickname is already used;
- 1: connection accepted;

GameMessage

Message sent from the client to the server to communicate the type of move which is specified through the attribute TypeOfMessage and its value, specified through the attribute Value.

Arguments

- TypeOfMessage: AssistantCard, StudentColour, StudentPosition, MoveMotherNature, CharacterCard, CloudChoice, IslandChoice;
- value: value of the game move;

Possible Responses

- Update: client's choose is right; this message updates client's view.
- Error: ErrorMessage with status code to display the reason of error.

UpdateMessage

Message sent from the server to the client to communicate the current game state.

Arguments

- TypeOfMessage: Update;
- GameState: contains the game state.

StringMessage

Message sent form the server to the client or viceversa to communicate a general string.

Arguments

- TypeOfMessage: String
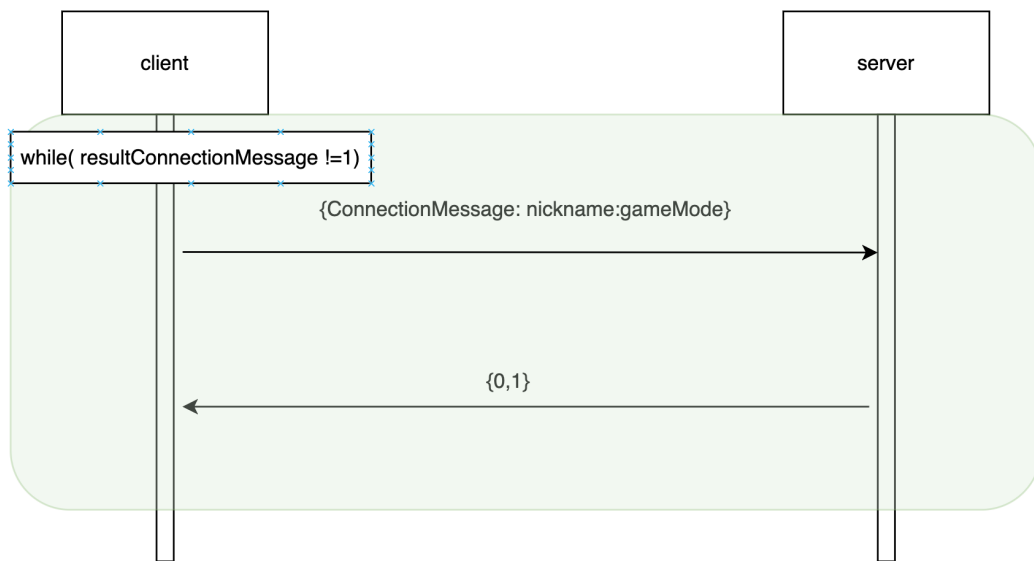- StringMessage: content of the string.

DisconnectionMessage

Message sent from the client to the server per communicate the client's will to disconnect.
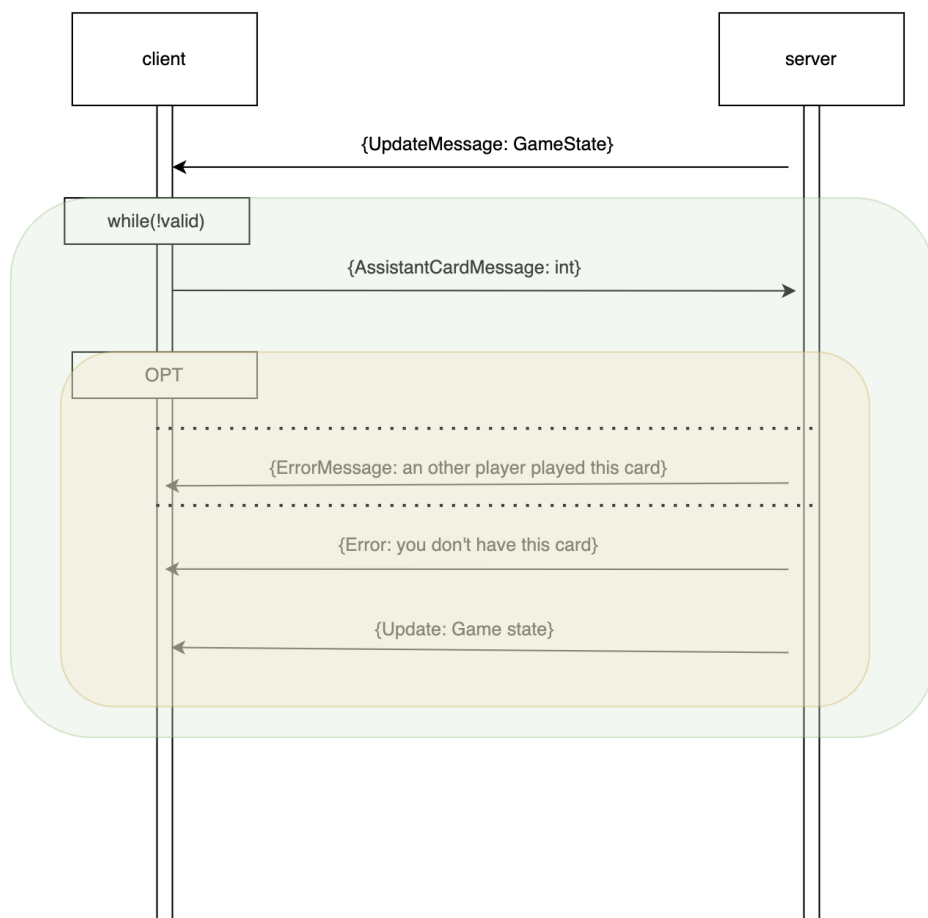
Arguments

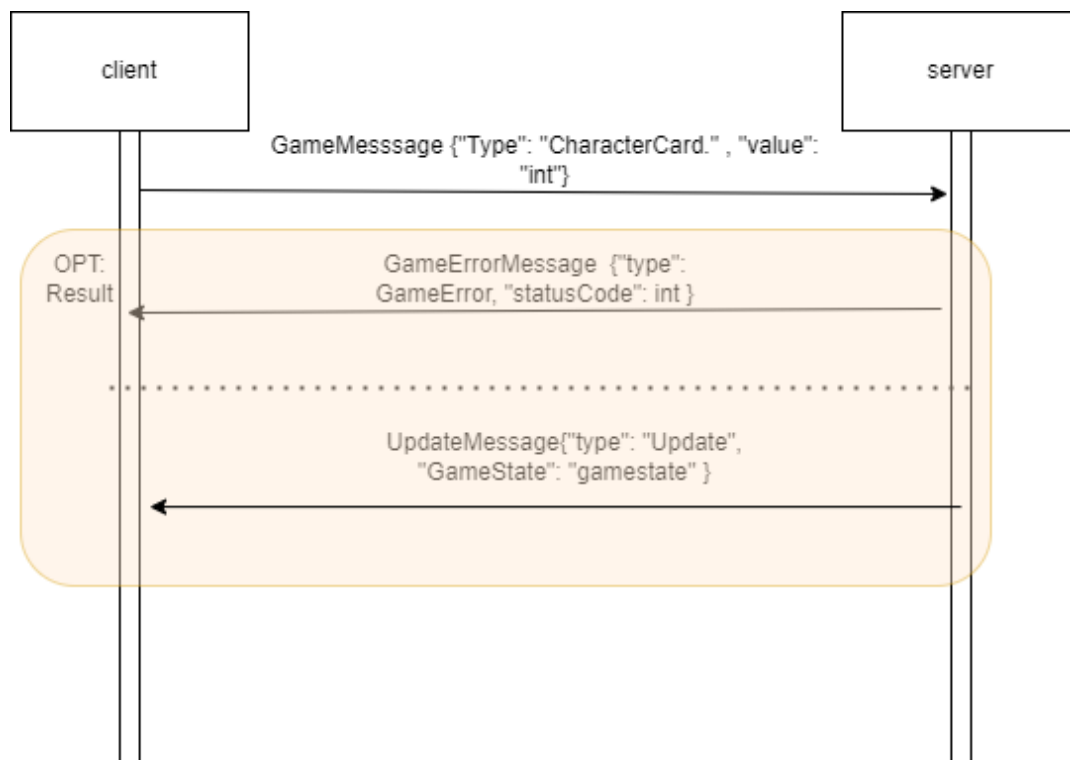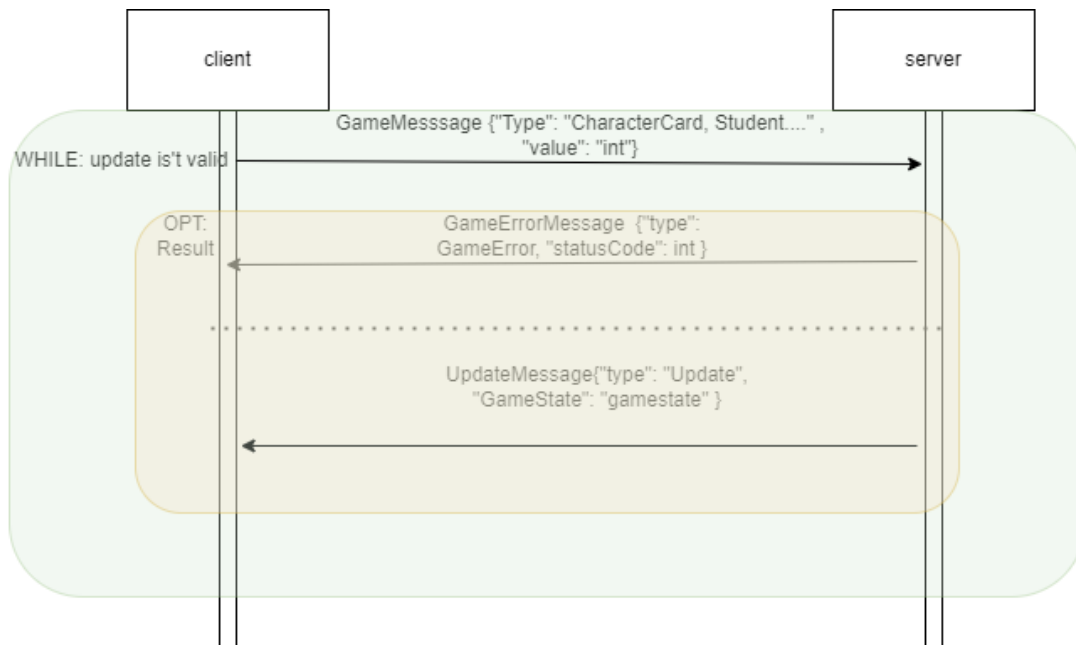- TypeOfMessage: Disconnection
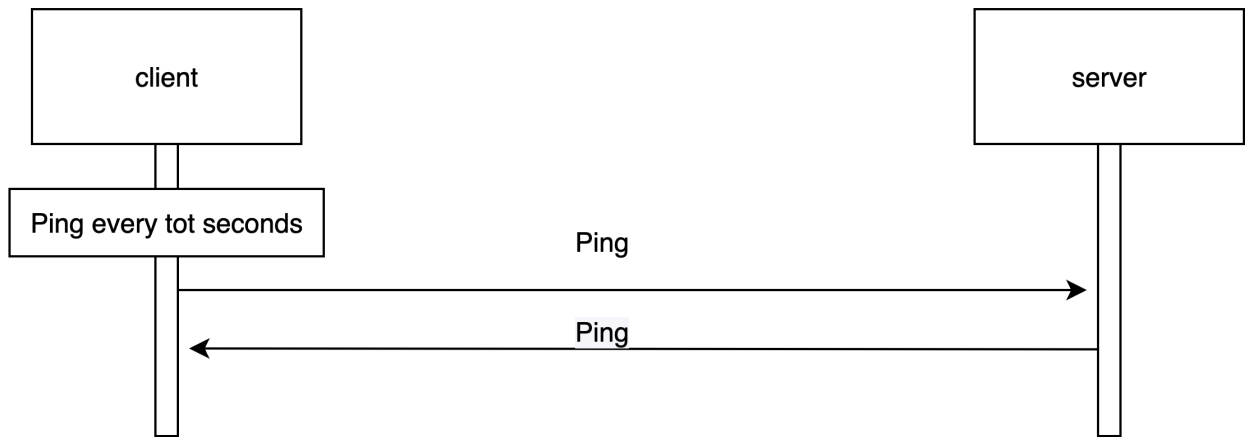
Scenarios

Connection

PianificationPhase

ActionPhase

According to the message sent from the client, there will be two scenarios (the client can send a GameMove or a CharacterCard). Moreover, a Character Card can be chosen in every moment of the ActionPhase.

Ping

```
┌──────────────┐                              ┌──────────────┐
│    client    │                              │    server    │
└──────┬───────┘                              └──────┬───────┘
       │                                             │
┌──────┴─────────────┐      Ping                     │
│ Ping every tot     │──────────────────────────────>│
│ seconds            │                               │
└──────┬─────────────┘      Ping                     │
       │<──────────────────────────────────────────  │
       │                                             │
```

Disconnection

```
┌──────────────┐                              ┌──────────────┐
│    client    │                              │    server    │
└──────┬───────┘                              └──────┬───────┘
       │                                             │
       │        {DisconnectionMessage}               │
       │────────────────────────────────────────────>│
       │                                             │
```