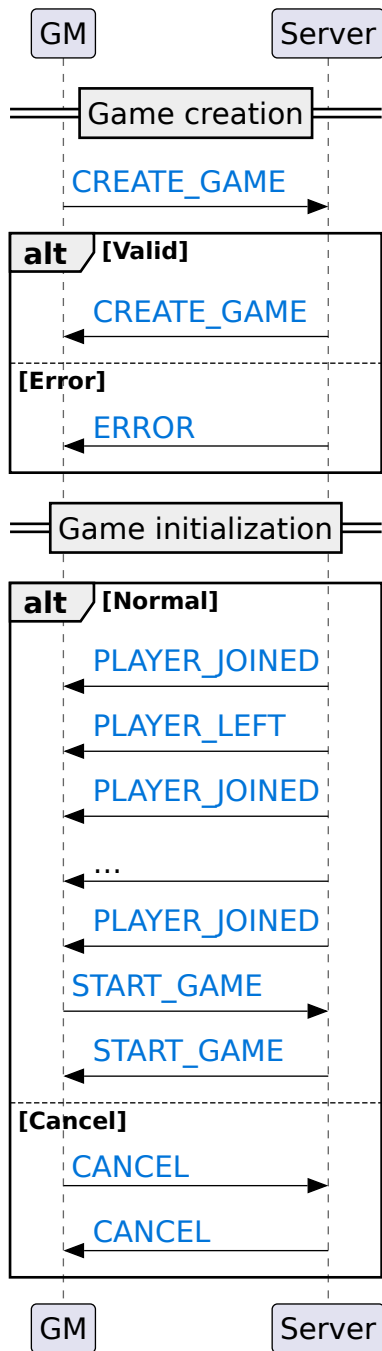# Contents

1 Spec

- All messages exchanged between the clients and the server are json encoded
- Messages have the following structure:

```json
{
  "message_type": "...",
  "content": {
    ...
  }
}
```

- The different possible messages are described in Section 3

2 GM - Server communications

GM **Server**

Game creation

GM → Server: CREATE_GAME

alt [Valid]

Server → GM: CREATE_GAME

[Error]

Server → GM: ERROR

Game initialization

alt [Normal]

Server → GM: PLAYER_JOINED

Server → GM: PLAYER_LEFT

Server → GM: PLAYER_JOINED

Server → GM: ...

Server → GM: PLAYER_JOINED

GM → Server: START_GAME

Server → GM: START_GAME

[Cancel]

GM → Server: CANCEL

Server → GM: CANCEL

GM **Server**

3 Message description

3.1 ERROR

Message sent when a server-side error occurs (ex: wrong arguments from a client request).

```
"content": {
  "reason": string,
}
```

- `reason`: Description of the error

3.2 CREATE_GAME

3.2.1 From the client

```
"content": {
  "n_hunter": int,
  "n_android": int,
  "n_ai": int,
  "hunter_turn_duration": int,
  "android_turn_duration": int,
}
```

- `n_hunter`: Number of hunter requested by the user, ≥ 1
- `n_android`: Number of androids requested by the user, ≥ 1
- `n_ai`: Number of AIs requested by the user, ≥ 1
- `hunter_turn_duration`: Duration of the hunters' turns in seconds, $\geq 2\mathrm{min}$
- `android_turn_duration`: Duration of the androids' turns in seconds, $\geq 2\mathrm{min}$

3.2.2 From the server

```
"content": {
  "game_id": string,
}
```

- `game_id`: The unique id for the game created by the server, this id will be used by the players to connect to the game

3.3 PLAYER_JOINED

Message sent by the server to the GM when a player joins a lobby.

```
"content": {
  "id": int,
  "username": string,
}
```

- `id`: The player's unique id for this game
- `username`: The player's username

3.4 PLAYER_LEFT

Message sent by the server to the GM when a player leaves a lobby.

```
"content": {
  "id": int,
  "username": string,
}
```

- `id`: The player's unique id for this game
- `username`: The player's username

3.5 START_GAME
Not yet defined

3.6 CANCEL
Message sent by the client to cancel a starting game when in the lobby.

```
"content": {
  "game_id": string,
}
```

- `game_id`: The unique id for the game created by the server, this id will be used by the players to connect to the game