Communication protocol

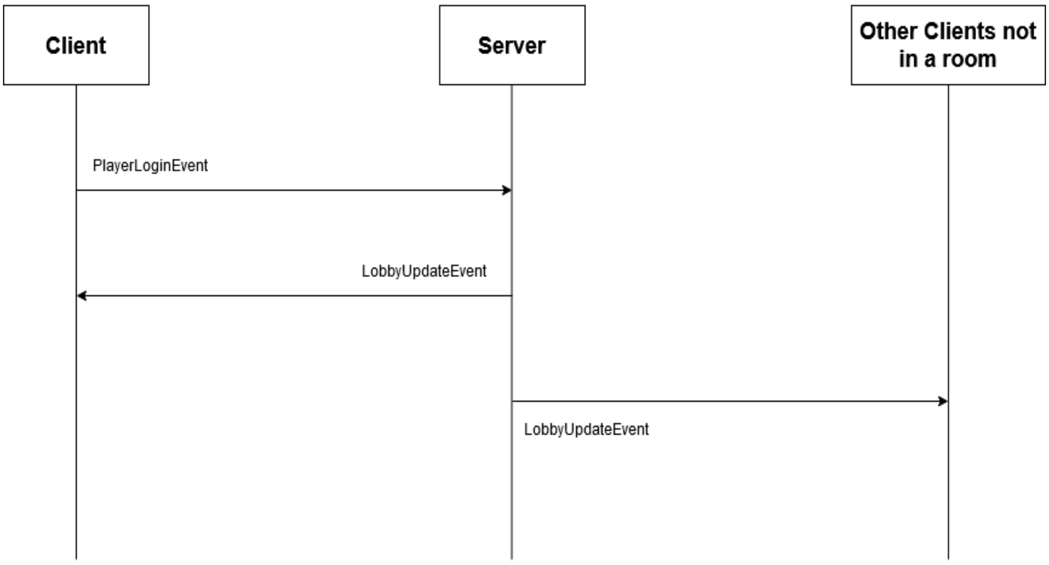
All the messages exchanged between the server and clients are coded in JSON and interpreted as events.
A ping message is sent asynchronously with the messages.
All JSON messagges use the following scheme:

```
{
        "event": "EventName",
        "attributes":
         {
                // class attributes
         }
}
```

The communication can be divided in 9 different phases (described below)

Inizialization

Login phase



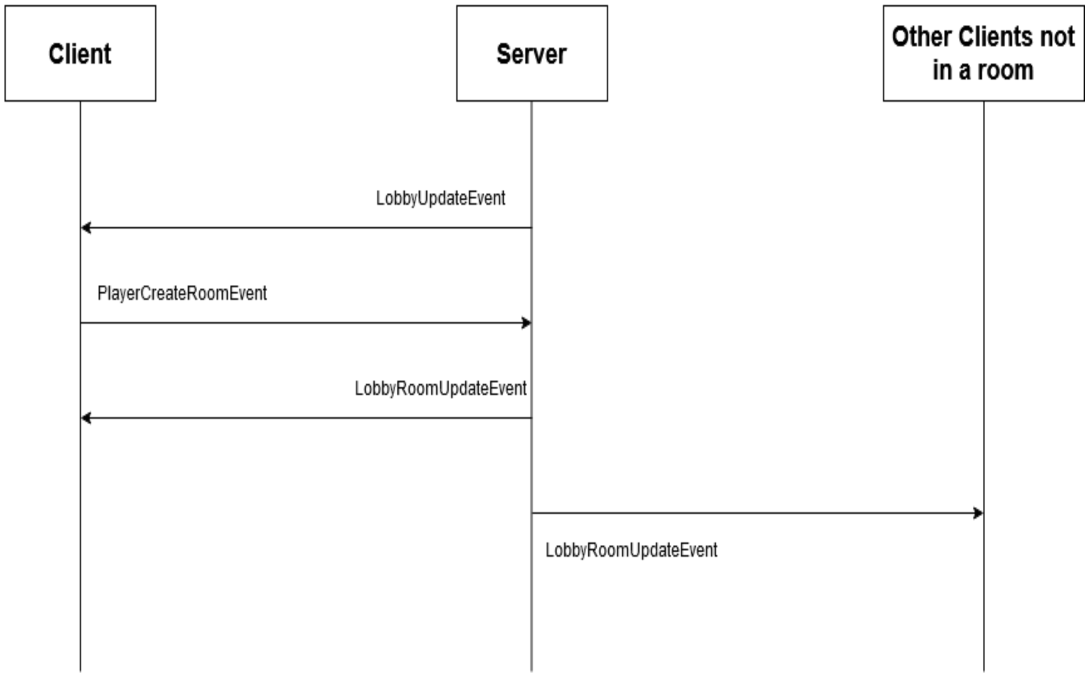
PlayerLoginEvent

```
{
        “event ”: ”PlayerLoginEvent”,
        “attributes”:
        {
                player : player,
                age: age,
        }
}
```

LobbyUpdateEvent

```
{
        “event” : ”LobbyUpdateEvent,
        “attributes”:
        {
                List of rooms,
        }
}
```

Create Room Phase



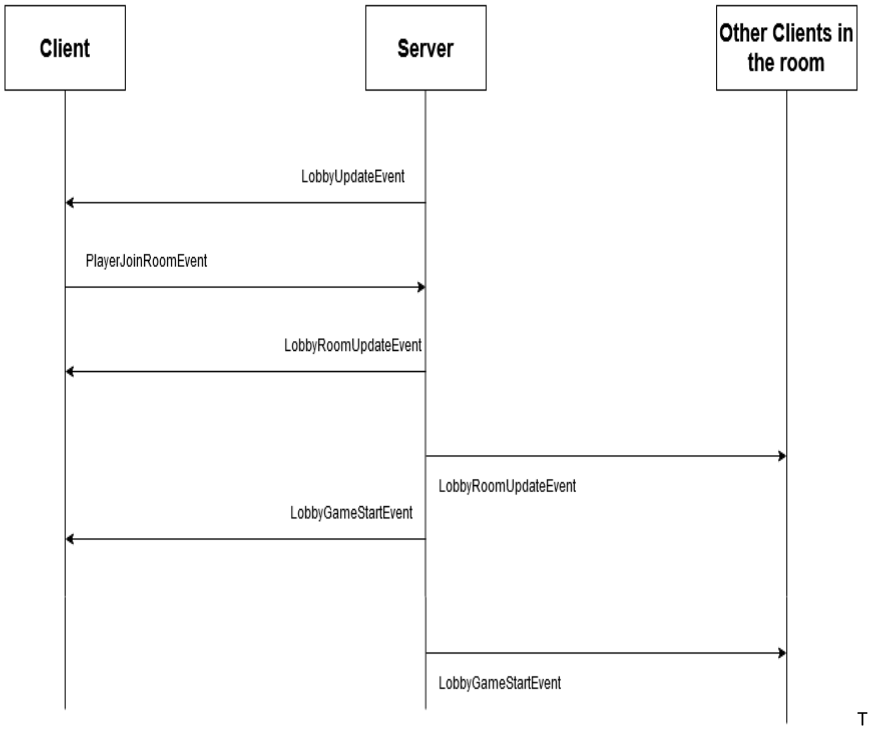
PlayerCreateRoomEvent

```
{
        “event” : “PlayerCreateRoomEvent”,
        “attributes”:
        {
                player : player,
                maxPlayers : maxPlayers
                simplegame : simplegame(Y/N)
        }
}
```

LobbyRoomUpdateEvent

```
{
        “event” : “LobbyRoomUpdateEvent”,
        “attributes”:
                {
                roomInfo : roomInfo, (Object that contains the room information)
        }
}
```

Join room phase



The game starts only if the max number of player is reached

PlayerJoinRoomEvent

```
{
        “event” : “PlayerJoinRoomEvent”,
        “attributes” :
        {
                player : player,
                roomOwner: roomOwner,
        }
}
```

LobbyRoomUpdateEvent

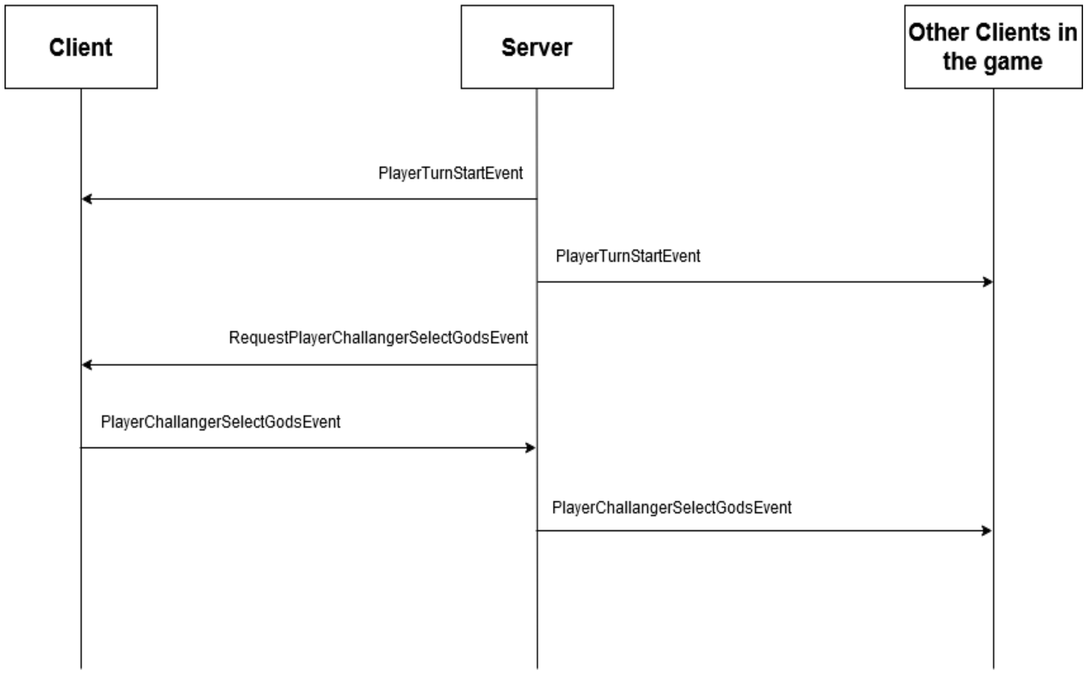
```
{
        “event” : “LobbyRoomUpdateEvent”,
        “attributes”:
                {
                roomInfo : roomInfo, (Object that contains the room information)
        }
}
```

LobbyGameStartEvent

```
{
        “event” : “LobbyGameStartEvent”,
        “attributes” :
        {
                player : player,
                roomInfo : roomInfo,
        }
}
```

Game Phase

Challenger Select Gods Phase (optional)


Client
Server
Other Clients in the game
PlayerTurnStartEvent
PlayerTurnStartEvent
RequestPlayerChallangerSelectGodsEvent
PlayerChallangerSelectGodsEvent
PlayerChallangerSelectGodsEvent

PlayerTurnStartEvent

```
{
        “event” : “PlayerTurnStartEvent”,
        “attrubutes”:
        {
                player : player,
        }
}
```

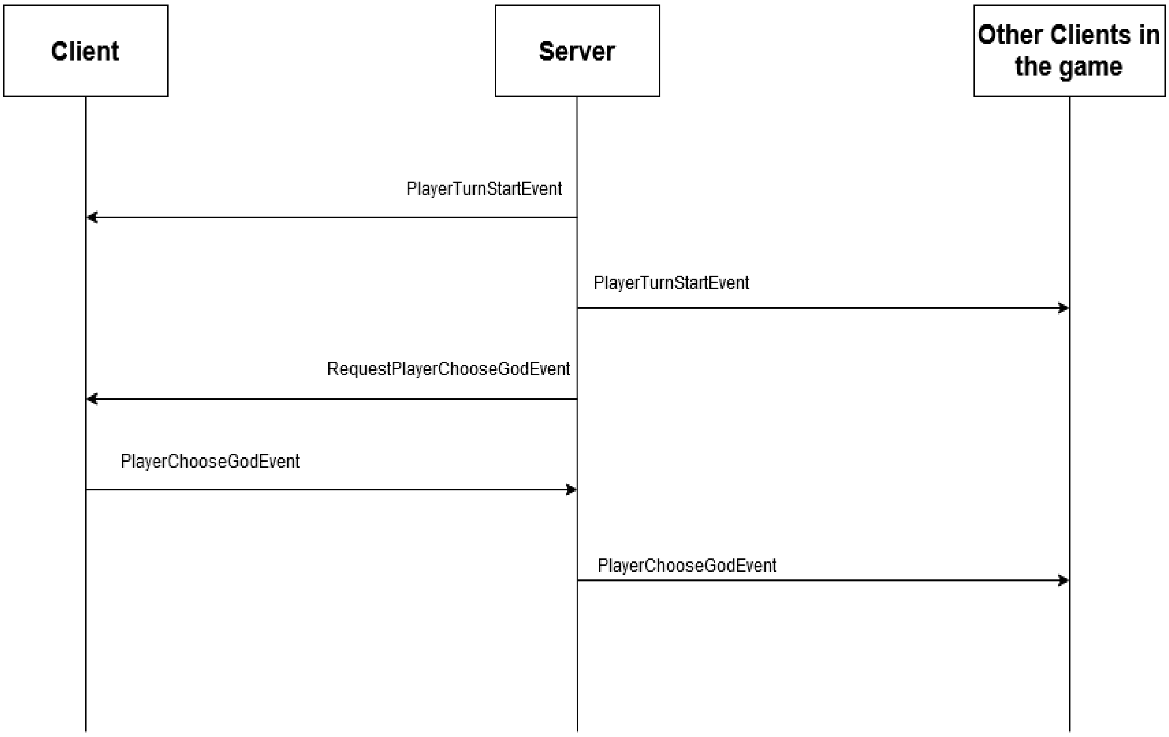
RequestPlayerChallengerSelectGodsEvent

```
{
        “event” : “RequestPlayerChallengerSelectGodsEvent”
        “attributes” :
        {
                player : player,
                List of gods,
                selcectedGodsCount (the number of gods to select),
        }
}
```

PlayerChallengerSelectGodsEvent

```
{
        “event” : “PlayerChallengerSelectGodsEvent”,
        “attributes” :
        {
                List of gods (the selected gods)
        }
}
```

Select gods phase (optional)



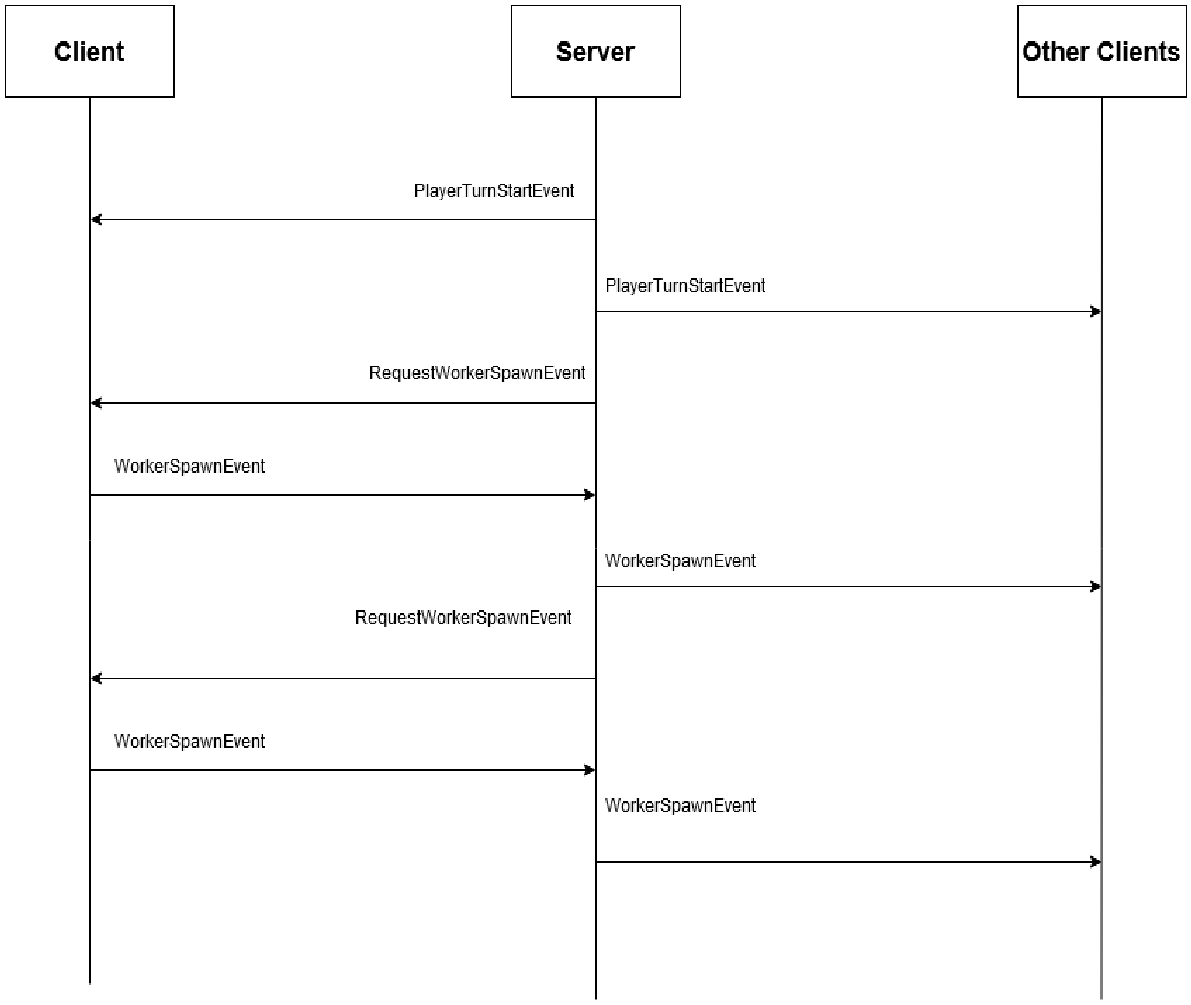
RequestPlayerChooseGodEvent

```
{
        “event” : “RequestPlayerChooseEvent”,
        “attributes” :
        {
                player : player,
                List of avaiable gods,
        }
}
```

PlayerChooseGodEvent

```
{
        “event” : “PlayerChooseGodEvent”,
        “attributes” :
        {
                player : player,
                god : god (the selected god),
        }
}
```

Spawnworker phase



RequestWorkerSpawEvent

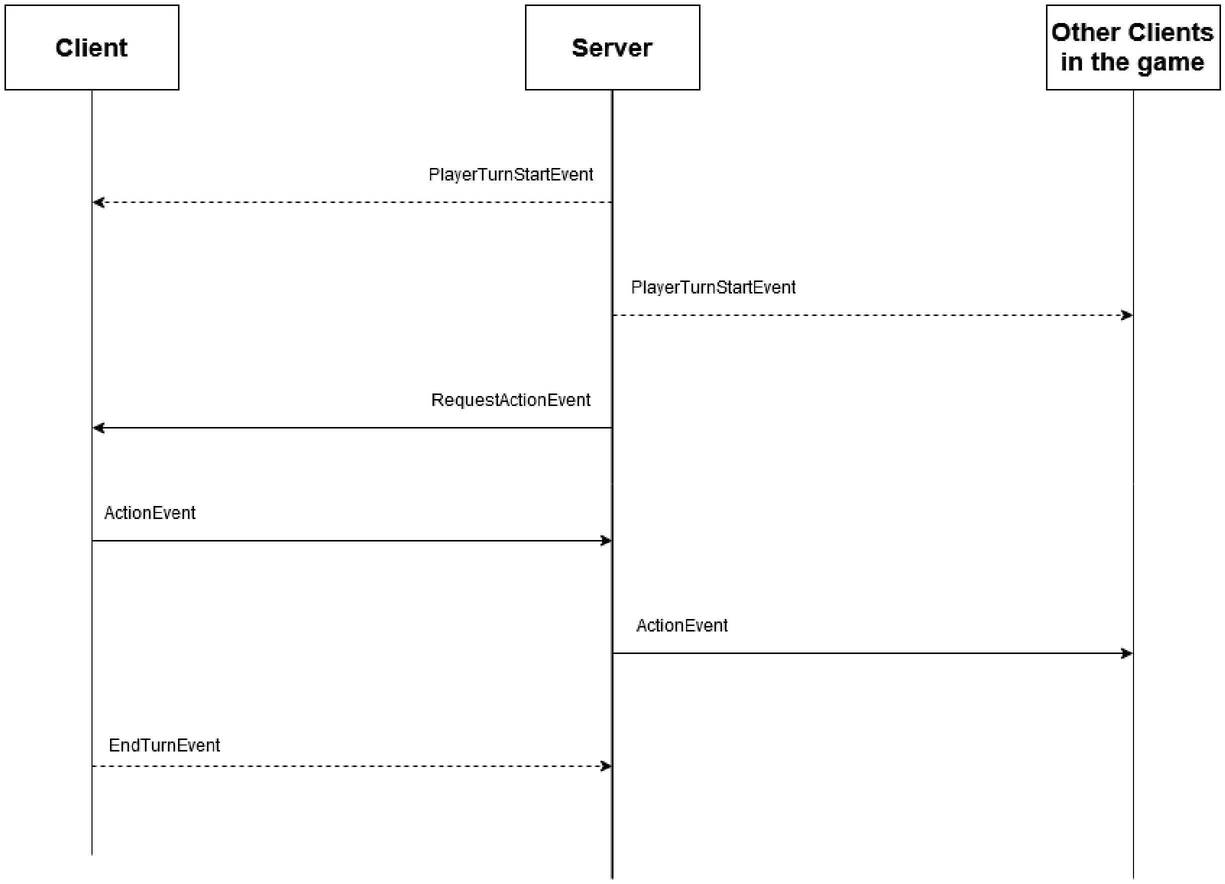
```
{
        “event” : “RquestWorkerSpawnEvent”,
        “attributes” :
        {
                player : player,
                List of avaiable positions,
        }
}
```

WorkerSpawnEvent

```
{

        “event” : “WorkerSpawnEvent”,
        “attributes” :
        {
                player : player,
                id : id (the worker id),
                position : position (coordinates),
        }
}
```

Action phase



This phase is the same for Move, BuildBlock, BuildDome and Force.

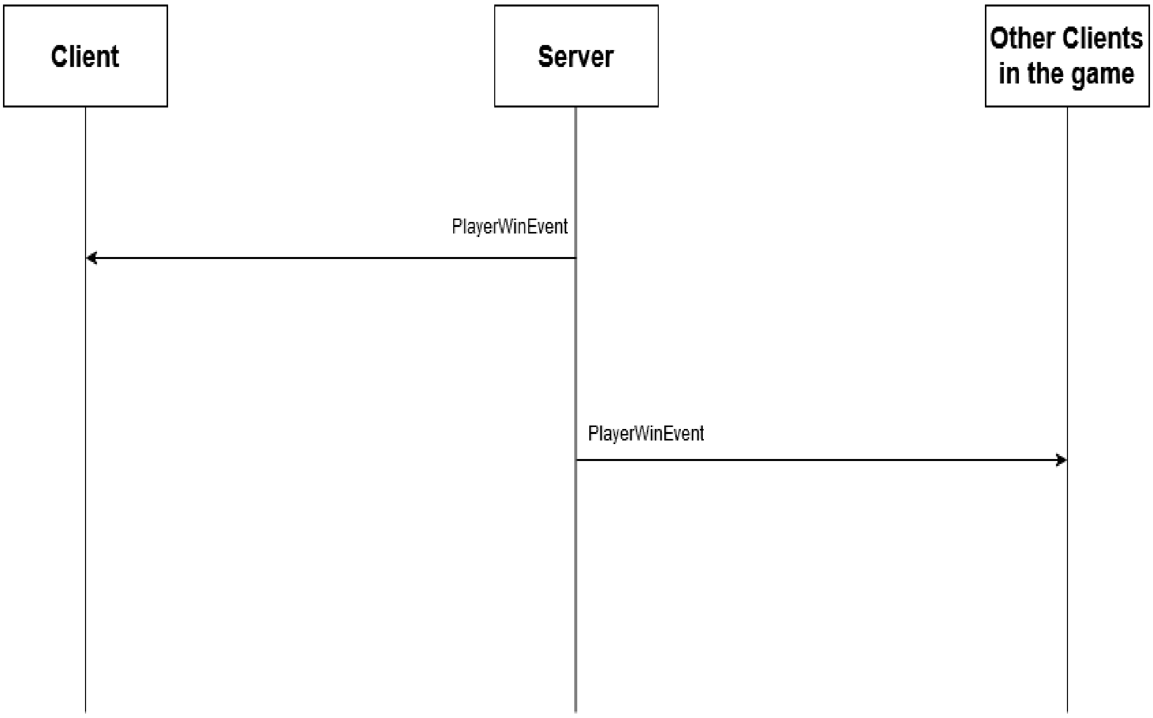
RequestActionEvent

```
{
        “event” : “RequestActionEvent”,
        “attributes :
        {
                player : player,
                worker : worker
                List of avaiable target (only in the force move),
                List of avaiable destiantions,
        }
}
```

ActionEvent

```
{
        “event” : “ActionEvent”,
        “attributes :
        {
                player : player,
                worker : worker;
                target : target (only in the force move),
                destination : destination,
        }
```

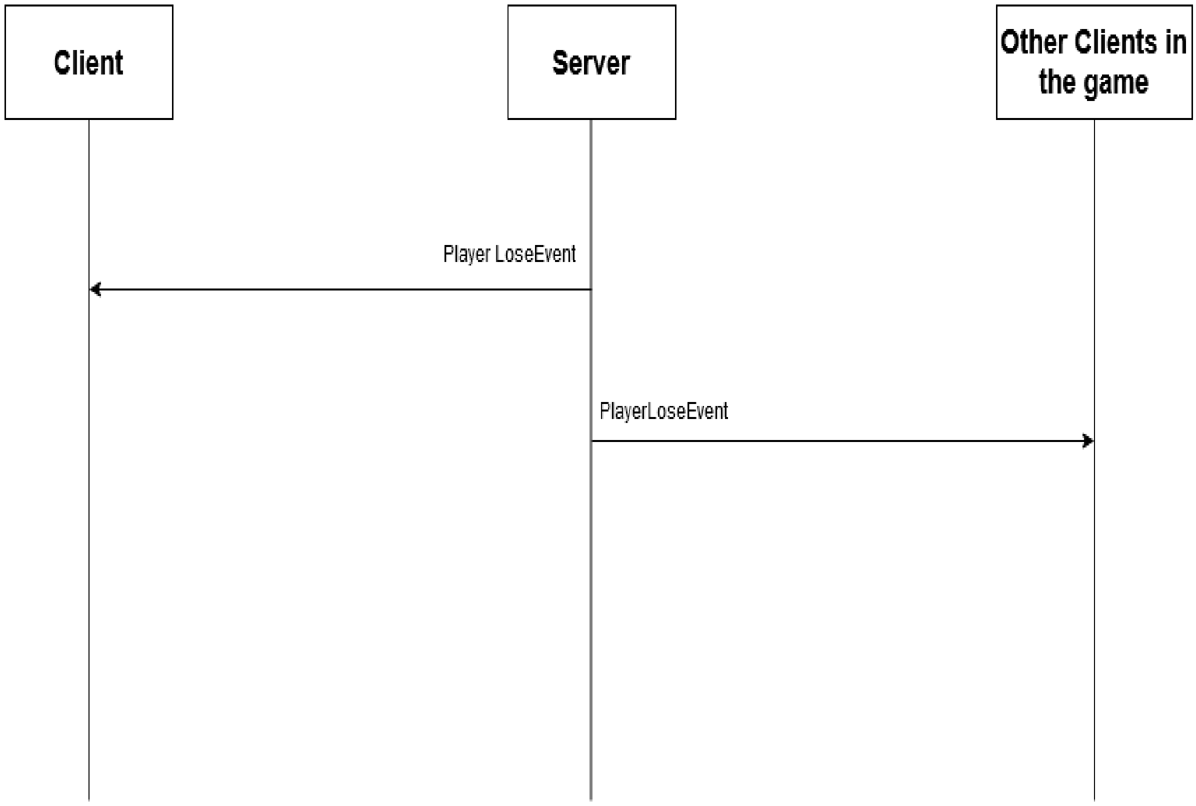
Win phase



PlayerWinEvent

```
{
        “event” : “PlayerWinEvent”,
        “attributes” :
        {
                player : player,
        }
}
```

Lose phase



PlayerLoseEvent

```
{
        "event" : "PlayerLoseEvent",
        "attributes" :
        {
                player : player,
        }
}
```