

INTRODUÇÃO ÀS REDES DE COMPUTADORES

Protocolo de Comunicação (GAME MASTER)

Versão Modificada

Delegação das partes:

- Player - Alexandre Mota
- Game Master - Daniel Lopes
- Scores - Duarte Matias

Protocolo de Transporte do Game Master:

O protocolo que irá ser utilizado no âmbito da comunicação cliente->servidor para a parte do Game Master será o protocolo de transporte **TCP**.

O motivo mais pertinente para esta escolha é o facto de ser preferível que o transporte dos pacotes seja fiável pois se ocorrer alguma alteração no jogo por parte do cliente Game Master é imperativo que essa alteração, no meio de muitas outras, chegue ao servidor Game Master e que não fique perdida, caso contrário, iria gerar problemas no jogo.

Formato das mensagens:

Client -> Server:

- **LOGIN** \n [automatic message exchange at client's startup]
- **PLACE<item_type>** \n [Adds trap, food or training center to random location]
- **SHOW_LOCATION:<player_name>:<optional item_type>** \n [if no item_type specified, shows everything that exists in current player's location]
- **ATTACK:<(src) player1_name>:<(dst) player2_name>\n**
- **EAT:<player_name>** \n [player_name is sent for server identification of the current player]
- **PRACTICE:<player_name>:<option>** \n [option is either 1 - attack, or 2 - defense]
- **ADDP:<player_name>:<attack>:<defense>** [add player to game]
- **LOGOUT\n** [ends client-server connection]

Server -> Client:

- **OK:<description>** \n [possible descriptions below]
 - Login successful
 - <item_type> Placed Successfully
 - Location has:
 - List: <player1_name, player2_name... playerN_name> \n (optional)
 - Food: <food_quantity> \n (optional)
 - Trap \n (optional)
 - Training Center \n (optional)
 - Attack Successful \n
 - Ate Successfully \n
 - Practiced Successfully
 - <player_name> fell into trap \n
 - Player added Successfully \n
- **NOK: <description>** \n [possible descriptions below]
 - Failed to Login [<reason>] \n
 - <item_type> could not be placed [<reason>] \n
 - Attack Failed [<reason>] \n
 - <player_name> could not Eat [<reason>] \n
 - <player_name> could not Practice [<reason>] \n
 - <player_name> could not be trapped [<reason>] \n
 - Failed to add player [<reason>]
 - No Such Player
 - Invalid message type

Diagrama Temporal (diferentes sequências de ações):

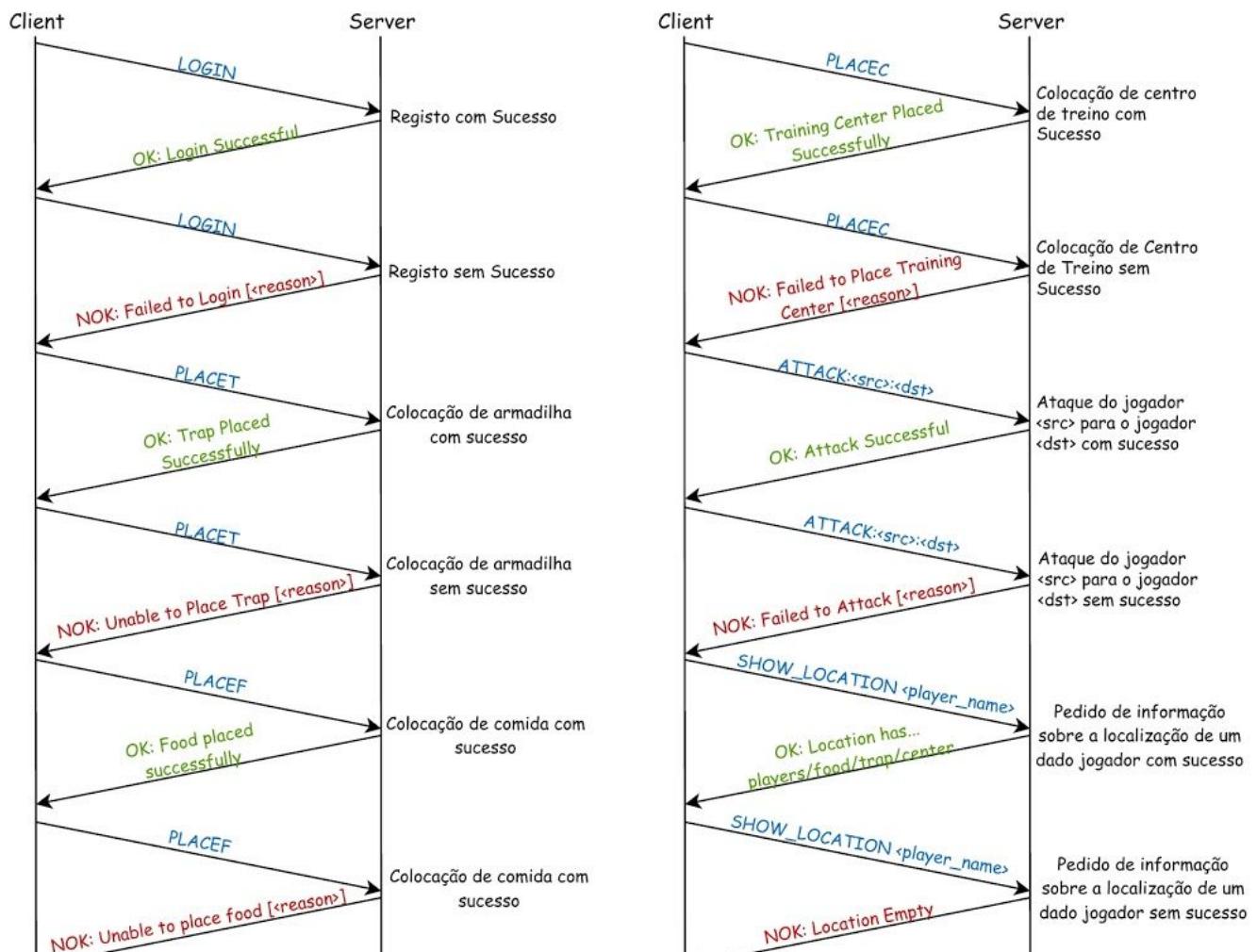


Diagrama extra:
(add user e invalid user name)

