

Lab 4: Multi Client / Server Applications Rock/Paper/Scissors Game

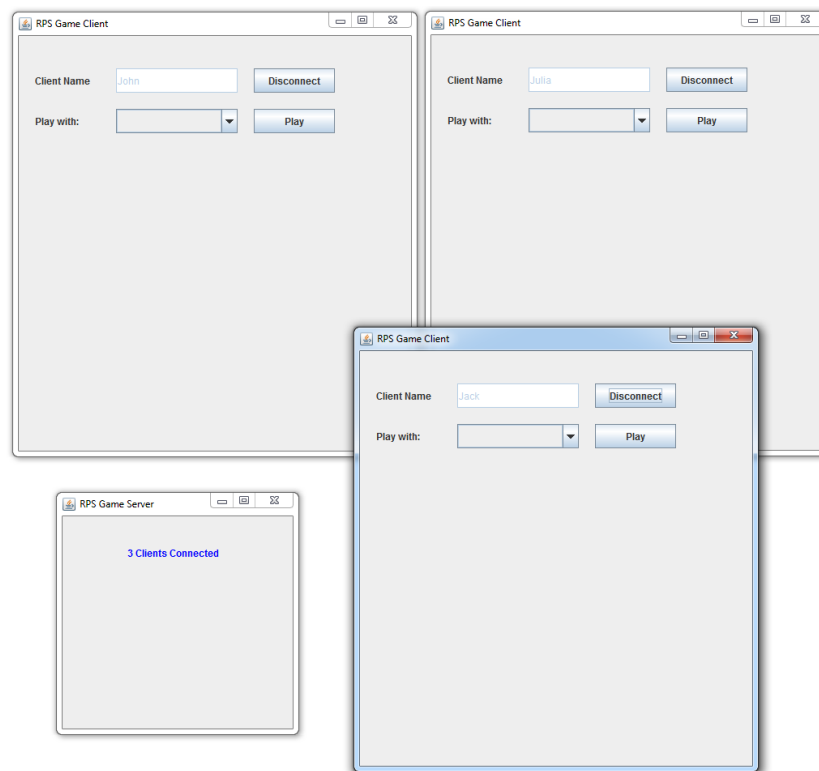
1. Objectives:

- 1- Multi-Client / Server Applications Implementation.

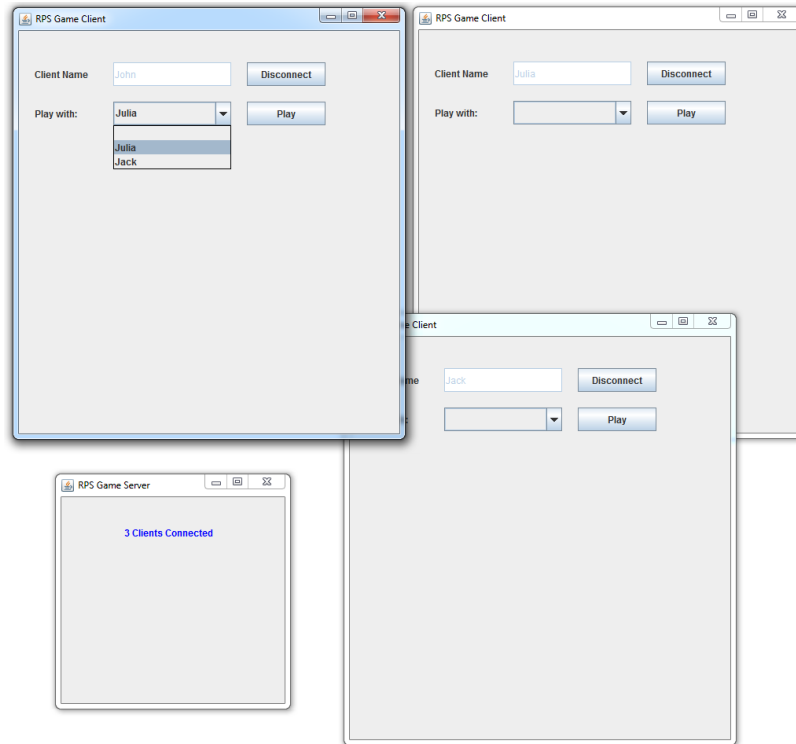
2. Assignment:

Implement a Rock/Paper/Scissors game application with one server and multiple clients with the following options:

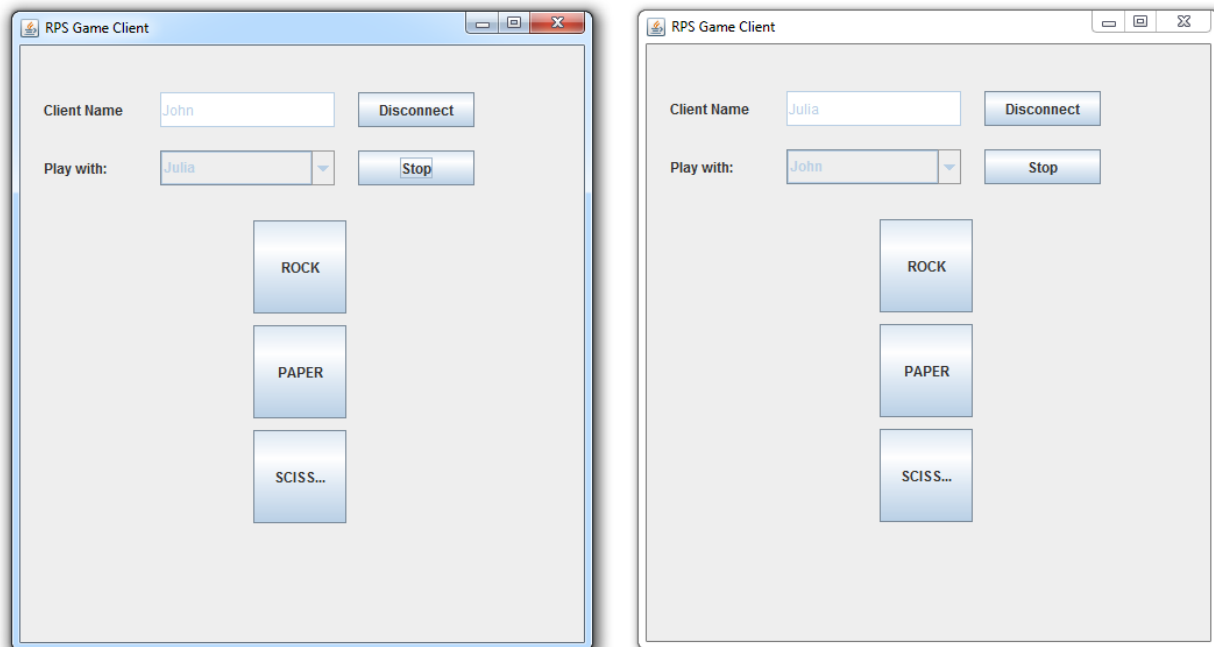
- 1- Multiple clients can connect with their names to the server.



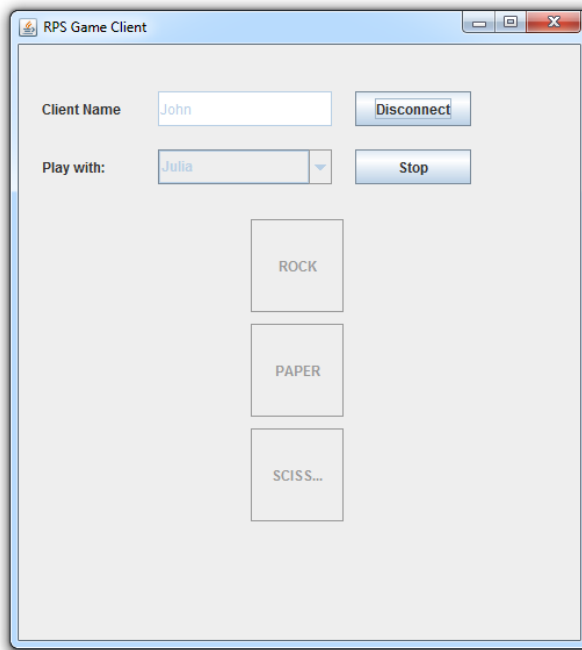
- 2- A client can choose a player from a list of available players to play with. Only available players (players who currently are not playing) are shown in the list and can be chosen.



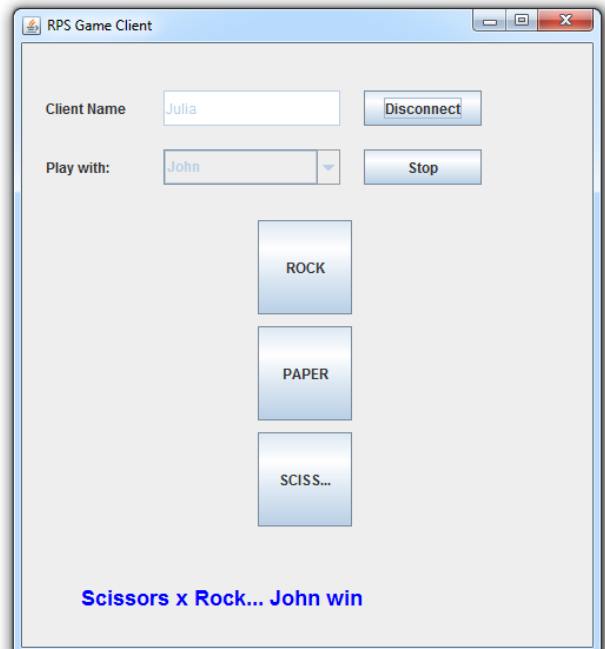
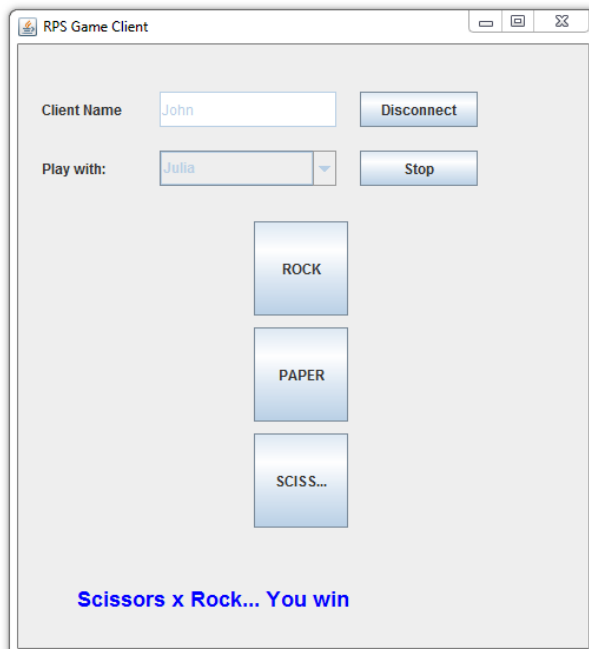
- 3- Once a player is chosen to play with, the game choices are shown on the windows of both players, and list box will become disabled.



- 4- When a player chooses on of the choices, the choice will be sent to the server. The three choices button will become disabled, waiting for the other player to play.

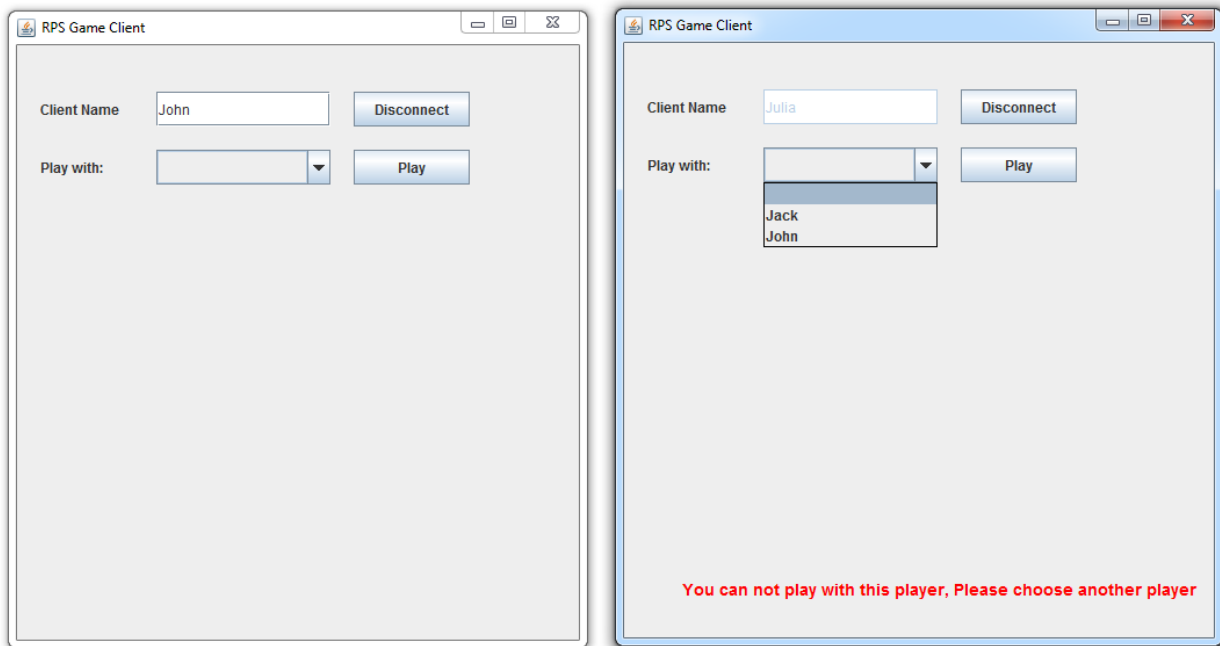


- 5- When the second player play, the choice will be sent to the server, which decides who the winner is and announce the game result to both of the two players.



- 6- During the game, any one of the two players will have the option to stop the game. In this case a message will be sent to the second player telling him that he cannot play with this player anymore and give him the option to choose another player.

The same message will also be sent if any of the players disconnect during the game.



NOTE: Bonus Feature:

- When player1 chooses player2 from the list to play with. A message is shown to player2 asking him/her to accept or deny the game. If accept, the two players will be joined and continue to the game. If deny, tell player1 that player2 denied the game and get back to the original home window to choose another player to play with.

Please do not forget to submit the discussion of assignment 4.