

Write a client/server application that simulate the Following game (Secret Word, with 2 Players at least):

The Required game works as follow:

First, the Server start, and configure the game (Choose the category “at least three category”, and Level of Difficulty ”at least three”), then wait till a client request to play.

When a request to play is received from the client, and the server accept this request, a Message box appears to the client shows the Category and level of difficulty selected by the server and give him the choice to accept play or to cancel play. If accept play, the game start, otherwise the client close.

The game start:

A word is selected randomly from the database (at the server machine) depending on the criteria configured by the server.

Both server and client must have the same Graphical Interface which is as follow:

26 buttons, one for each character, dash lines each line represents a character from the selected word.

At the beginning, the server is active and the client is dimmed, and the server start to play and choose a character, if the character is in the selected word, it appears over the dash line in both Client and Server at the same time (the character appears in all location) and the button of this character is in-active and the server continue playing till he choose a wrong character, At this point, the server becomes dimmed and the client is active, so the client plays till he choose a wrong character, then the server plays and client dimmed,...

The game ends when one of the server or client writes the last character in the selected word. The one who write the last word is the winner.

When game ends, a message box appears in both client and server interface having congratulation message for the winner and a sorry message for the loser, and a question asking to play again or no (Question for both).

If both client and server accept to play again, another game started and another word is selected.

If the client refuses to play again, the connection between server and client is closed and the client is closed and the server returns to waiting for a new connection.

If the server refuses to play again, the connection is closed and the server returns to waiting for a new connection.

When the game ends, by refusing to continue, the result of the game is stored in a text file in form of Server “value”, Client “value”, in the server PC

In case the server player has a name, and the client player has a name, their names are stored instead of Server and Client.

A menu item in the server application, named score which display all the data from the text file.

Optional:

In the Above description, the server act as one of the two player, and other player play with him.

It is Optional to make the following modification:

- 1) The Server start and maintain a list of all connected clients (Not a Player).
- 2) Any client want to play, create a Room identifying in it the number of Player and the Category and Level of difficulty.
- 3) Each connected client watch the available Rooms, and can join any room
- 4) The Game Continue as defined in the Initial Section.
- 5) After the game end, the client choose to continue or to leave the room
- 6) When the creator of the room leave, the room is closed
- 7) It is applicable that a client join a Room as “Watching”, even the game has started. In this case, he will have the same interface only without having the option to modify, and can leave at any time