

DESIGN OF COMMAND LINE BASED CHAT ROOM

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ABSTRACT

Command line-based chat room will be offering the user reliability, security and the minimum cost communication among staff members among staff members of the company or an organization. And along with this, this chat room will also provide the facility of file transfer. It also helps in clarify the communication problems that may be in respect to the time and cost as well. The proposed protocol facilities will help us to exchange the information among individuals by providing them various communication options. Basically, this chat room has been developed using python as a programming language and will be testing at LANs of our college lab network.

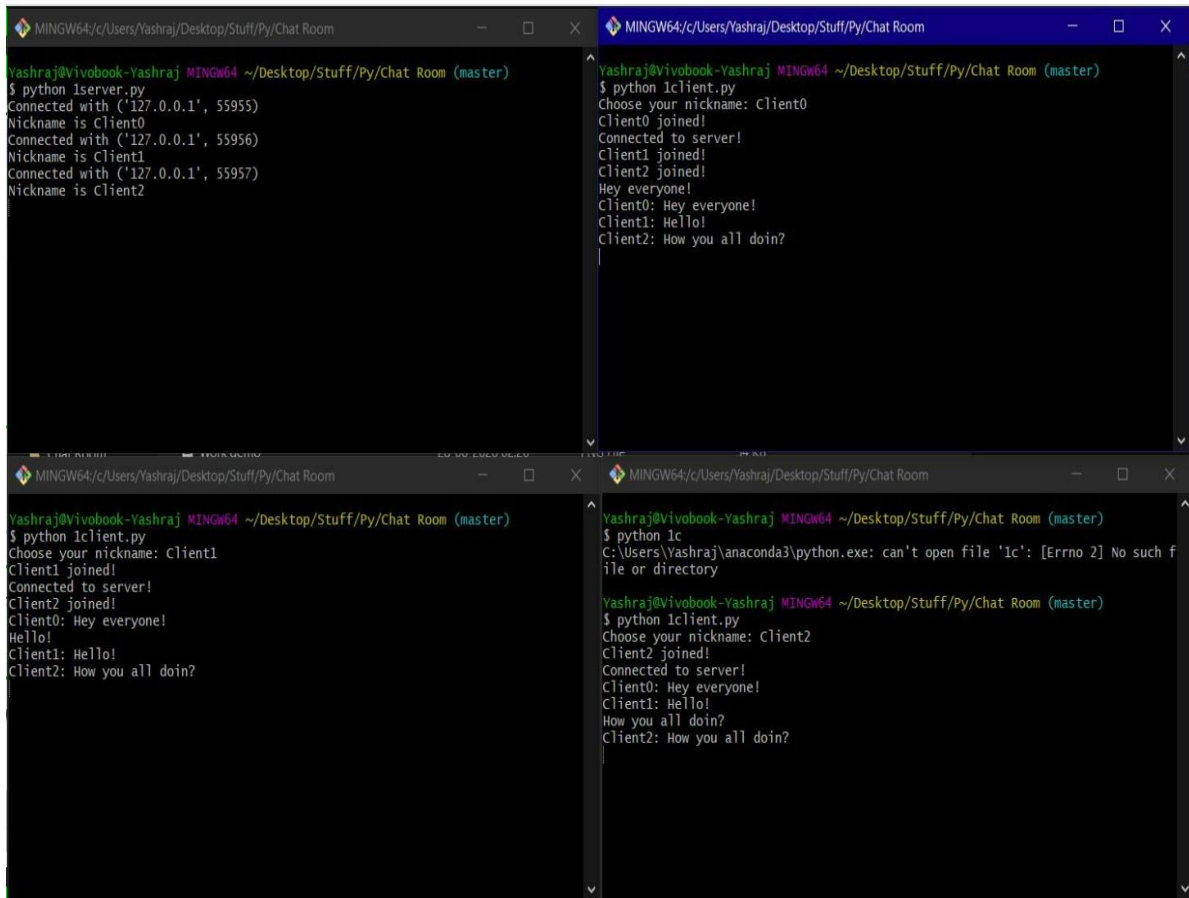
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I. INTRODUCTION

The basic aim of this work is testing the history of communication and many technologies related to the networking concepts. The basic pillars of the communication are like telephone, email and telegraph. This opportunity is introduced by internet to create the cloud of "digital convergence" which basically includes communications, computing and broadcasting in a unit system inside the global network. The differences between the broadcast communication and point to point communication has been started to disappear from past few years. so we can have idea of communication to be evaluated in future and will eventually achieve that convergence in which there will be a continuum between the point to point and broadcast communication. A basic alternative feature of all the communication services has been so much priced that their relation with the cost has begun to be minimum. While the basic structure of prices has been traditionally involving cross subsidies. And it has also become very difficult to identify such subsidies either they exist or not. Many great mistakes have been committed by the various telephonic companies in assessment of the future development of the telecommunication. And these values have been constantly proved to be low and show all connected and disconnected users. The stop button in the application will be responsible for closing all the sockets. The button named online users will be responsible for showing the user that are currently online. The button named clear will be used to clear the text area. Nowadays there are minimum facility available in many organizations in spite of having various advancement in network technology. Usually, these types of organization are unable to adopt the new technologies having new pattern besides not basic pattern of the communication for the instant messaging services. The basic method of the communication can be introduced by relying on conventional method of the communication running in all over the world. The advancement in new technologies bring advancement in the activities that are performed on the basis on them. Therefore, the command line chat room will be running or working out in two phases. The first phase of the application will be involving the client-side code and the other phase of the application will be involving the server-side code. Both the code are written in python as a programming language for both client and the server side. Firstly, the server-side code will run by the user and then the client-side code will be. Once the server-side code has been run, it will inform the user that the server is running without any problem. As there are 4 clients taken for an instance in this project. Therefore, client-side code of every client will be run by the user and each client starts to connect with server. the server will also inform you that the client has been successfully connected to the server or not.

II. THE PROJECT INTERFACE

A. SERVER SIDE CODE INTERFACE- The first quadrant of the given below figure represent the server-side interface that will be shown on the command line prompt once the server-side code has been run by the user. As the figure shows the given data in the server side is the port address of each client connected to the server.



B. CLIENT-SIDE CODE INTERFACE- The quadrant given in the above figure other than the server-side interface are the client-side interfaces. As for the instances there are three clients connected to the same server. and the name of each client has also been chosen out by the user itself. the same client's name is showing in the above picture. The permission of choosing the nick name is in the user hand. Hence three clients are connected to the above server with having their unique port address.

C. CONVERSATION INTERFACE- The chatting or conversation between all the client will be done very smoothly. The message sent by anyone of the client connected to the same database or server will be broadcasted to each of the client connected. The messages is broadcasted using the TCP protocol .one may also send the message by using their voice as we have used voice to text converter library that is the standard library in the python programming language. this feature is very helpful for the client who have eye issues or are completely blind. In the same way we will be importing the text to speech converter on the other side of the client for the user those have ear issues or are the completely deaf by nature. Both the library is the standard library.

III. RESULTS

The overall result of the above application is very secure and smooth. as the clients are easily able to communicate with their companion clients. and hence the message is broadcasted successfully.

The name of the clients are Sara, Lara and the liquid all are the online users and this is informed by the application that all three clients has been connected successfully.



Fig.6: a running client interface

The figure 6 shows that the how conversation between the client will be going on. in the above interface sara has sent the message and the message of sara has been broadcasted to every client connected to the same server having different client.

The client information will be stored in the server for the further use and future purpose. if client want leave the chat room for any specific region, then he may request to the server to remove his connectivity from the chat room. and then all the client will be informed that the particular client with the particular user's name has been removed from the room. even if any new client Want to enter in the chat room, then also he must have to take permission from the server for the same. And in the similar way to the removal of a client from the room, all the client will be informed that the client with some nickname has joined the chat room.

IV. CONCLUSION

The above project explanation has solved the communication problems it may be among the staff members and also reduce the communication and cost also. The chat messenger will support the many chat types.

The private chat with more than one online user can chat together even without internet connection. This application allow file exchange as well will allow same local connection. The running client interface will be done successfully. The common feature of for all the communication services that convergence then there will be continuum between the both point to point and broadcast communication. The average prices from the long time have been decreased in the line with the decrease in the cost. While the structure of the prices has traditional included by crossing subsidies. And it is also very difficult to talk about such subsidies either they

exist or not. One could hope that at least the economics of postal system would have been well understood. These types of the system are large, relatively slowly changing are usually open to the public scrutiny. It also takes the place in various entities from such as speech, text, signal and the likes. It can also be called the conceptual way exchanging the information between the entities. This paper is structured as follows in section 2 of this research discussion about the project interface. And the section 3 of this research paper describes how the client connected to the server. and the section 4 of this research paper is about project protocols. The section 5 of this research paper will be giving the output of the project's implementation. Finally, the conclusion of this research paper is "connected". When the server received the "connect" that is mean that the new client it may be public client or private client is connected. The server performs some operation: and we have to check if the username is public or private in nature. If the type of username is found to be public add it to array list. And then send the arraylist to all the user that are already connected in order to update the client in online list.

V. REFERENCE

- [1] Alcantara, G. K. L., Evangelista, I. D. J., Malina, J. V. B., Ong, O. B., Rivera, R. S. D.,
- [2] & Ambati, E. L. U. (2018). Head detection and tracking using OpenCV. In 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM) (pp. 1-5). IEEE Opencv.org, „About OpenCV“, 2017. [Online]. Available: <http://www.opencv.org/about>
- [3] Hoque, M. A., Islam, T., Ahmed, T., & Amin, A. (2020, March). Autonomous face detection system from real time video streaming for ensuring the intelligence security system. In 2020 6th International Conference on Advanced Computing and Communication Systems (ICACCS) (pp. 261-265). IEEE (2017, January 17). Object Detection [Online]. Available: http://en.m.wikipedia.org/wiki/Object_detection
- [4] Alcantara, G. K. L., Evangelista, I. D. J., Malina, J. V. B., Ong, O. B., Rivera, R. S. D.,
- [5] & Ambati, E. L. U. (2018). Head detection and tracking using OpenCV. In 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM) (pp. 1-5). IEEE
- [6] Opencv.org, „About OpenCV“, 2017. [Online]. Available: <http://www.opencv.org/about>
- [7] Hoque, M. A., Islam, T., Ahmed, T., & Amin, A. (2020, March). Autonomous face detection system from real time video streaming for ensuring the intelligence security system. In 2020 6th International Conference on Advanced Computing and Communication Systems (ICACCS) (pp. 261-265). IEEE (2017, January 17). Object Detection [Online]. Available: http://en.m.wikipedia.org/wiki/Object_detection