



ISSN: 2350-0328

**International Journal of Advanced Research in Science,
Engineering and Technology**

Vol. 6, Issue 10, October 2019

Review of an Interactive PC-Chat Application System

Isiaka O.S, Bolaji-Adetoro D.F. , Saka T.O.

Department of Computer Science, Institute of Information and Communication Technology,
Kwara State Polytechnic, Ilorin.

ABSTRACT: Among the problems facing PC-chatting application is the designing an interactive interface (environment) for users and absence of usability goals such as efficiency, effectiveness, good utility, difficult to learn etc. The aim of this project is to develop an application that will take care of the setbacks of modern mode of communication by replacing it with a system capable of exchanging instant messaging among users by designing an interactive and user-friendly chat application that enhances mutual relationship and understanding among individuals. PC-chat application helps people to maximize the benefit of their communication and minimize the cost of doing so. It also enhances mutual understanding among people since as far as technological development of today is concern, instant messaging has been providing, easier, faster and convenient mode of communication among people.

KEYWORDS: PC-chat, away messages, broadcasting, interaction, client notion, server notion

I.INTRODUCTION

Computer devices have come a long way from its ancestors. They have come from simple house computer to today's current market of computer devices where you can check your email, watch videos or movies, to even being able to have one-one chat. Therefore, today's market of computer devices causes you to have various applications that can include GPS or even today's hottest video game as well as various chat applications. The development of PC chatting applications is characterized by three factors. These are the maturity of the computer network infrastructures, advanced computer hardware, and increasing demand for computer applications/services (Christian, ArneandAnja, 2003).

Language is an integral part of human culture. There are many aspects that make up communication, but humans are unique in an organized spoken language, which allows people to communicate on a deeper, more personal level (Boneva, 2006). As the world move further into the electronic age, people rely more and more on technology. In the language realm, this technology has taken people from face-to-face communication and letter writing, to inventions such as the telephone, the cell phone, online chat rooms, and finally, one of the newest and fastest growing forms of communication is PC-chat (Krantet al., 2010).

Communication is constantly changing, and it is important to understand this change in order to apply it to our lives and relationships. In Capitalist society, there are tremendous emphasis on rushing, getting things done (right now); never slow down. As a result of this, it has become easier, i.e. more time-efficient, to utilize technology. People can make plans with a friend in two seconds over PC-chat. Nowadays, because of the wonders of technology, it is increasingly possible to filter all human interaction through a computer; one almost never has to come into contact with another person. By studying the changes in language that are result of PC-chat, people may be able to have a better idea of how human communication is changing as a whole (Savickiand Kelly, 2000).

II.THE FUTURE OF COMMUNICATION WITH PC-CHAT

Now days, a process of communications is the important element to most organization as it create a lot of benefit toward themselves. For example, the communications between members in the organization are very important for archiving an organization mission and vision. The Instant Chat Monitoring Tool Server is the better solution to all the fast and effective communication solution in the organization. Before this, there is no much specific monitoring tool to monitor all the communication for chat (Nikita M. et al., 2014). Most of the monitoring tool now is more on monitoring physical network environment. There is no need for video conferencing or any complex configuration

setting to create the best communication just only in local environment, we are supposed to use the chat system to minimize the cost and time.

Communication is constantly changing, and it is important for us to understand this change in order to apply it to our lives and our relationships (Nik et al, 2015). In our Capitalist society, there is a tremendous emphasis on rushing, getting things done (right now); we never slow down. As a result of this, it has become easier, i.e. more time-efficient, to utilize technology. We have those nifty self-checkout lines at the grocery store, and we can make plans with a friend in two seconds over PC-chat. However, the cost of modern conveniences such as these is the loss of personal contact with others. Nowadays, because of the wonders of technology, it is increasingly possible to filter all human interaction through a computer; one almost never has to come into contact with another person. By studying the changes in language that are a result of PC-chat, we may be able to have a better idea of how human communication is changing as a whole (Whittaker and Bradner, 2000). The pages that follow reflect upon some of the elemental features of instant-message- based communication.

III.METHODOLOGY

Client server model is the standard model which has been accepted by many for developing network applications. In this model, there is a notion of client and notion of server. As the name implies, a server is a process (or a computer in which the process is running) that is offering some services to other entities which are called clients. A client on the other hand is process (which is running) on the same computer or other computer that is requesting the services provided by the server.

A chat application is basically a combination of two applications: Server application and Client application. Server application runs on the server computer and client application runs on the client computer (or the machine with server) (Chigozie, Williams and Osegi, 2014). In this chat application, a client can send data to anyone who is connected to the server as shown in figure 1.0. Java application programming interface (API) provides the classes for creating sockets to facilitate program communications over the network. Sockets are the endpoints of logical connections between two hosts and can be used to send and receive data. Java treats socket communications much as it treat input and output operations; thus programs can read from or write to sockets as easily as they can read from or write to files.

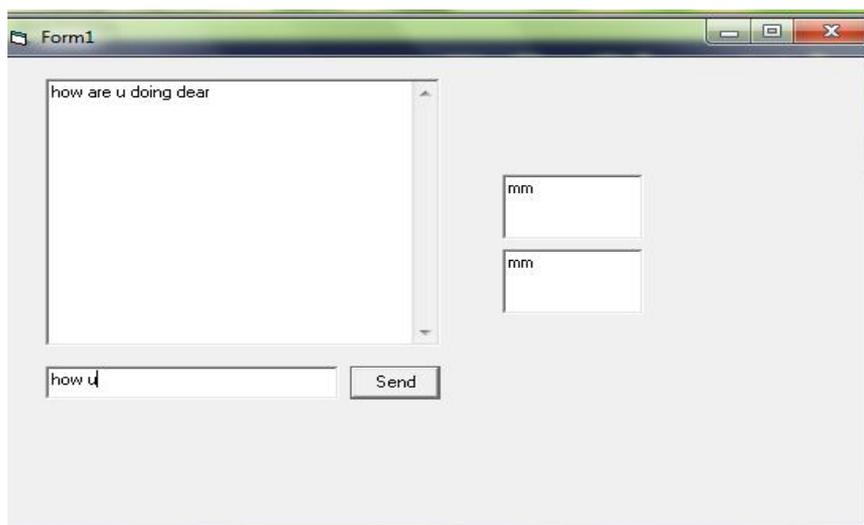


Figure 1.0: Sending Message Form

To establish a server connection, a server socket needs to be created and attached to a port, which is where the server listens for connections (figure 2.0). The port recognizes the Transmission Control Protocol service on the socket. For instance, the email server runs on port 25, and the web server usually runs on port 80.

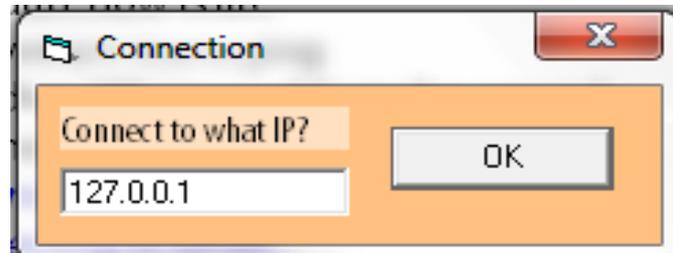


Figure 2.0: Entering IP-Address

Server Execution: At server the side as shown in figure 3.0, a thread is created which receives numerous clients' requests. It also contains a list in which Client's name and IP addresses are stored. After that, it broadcast the list to all the users who are currently in chatroom and when a client logs out then server deletes that particular client from the list, update the list and then broadcast the list to all available clients.

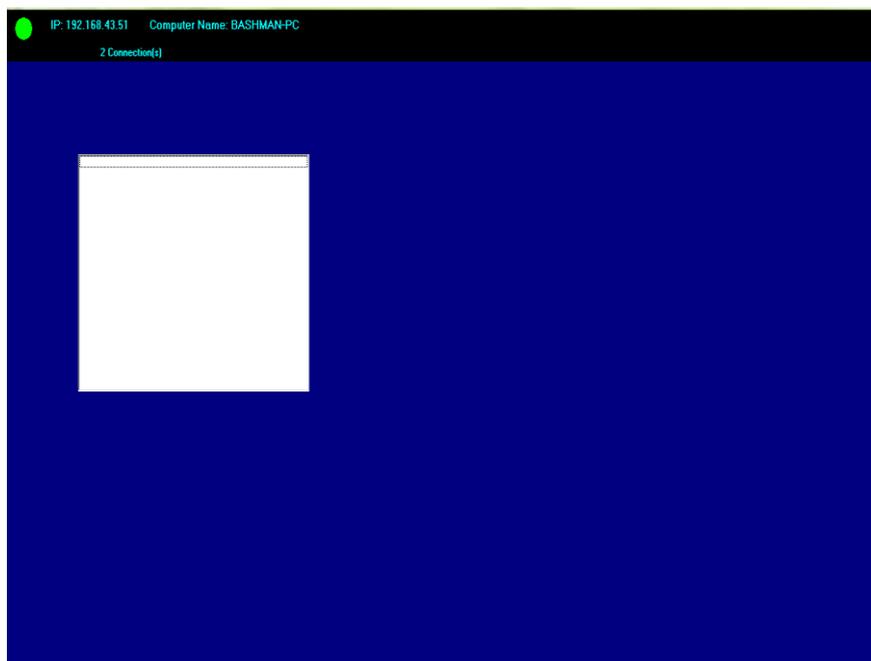
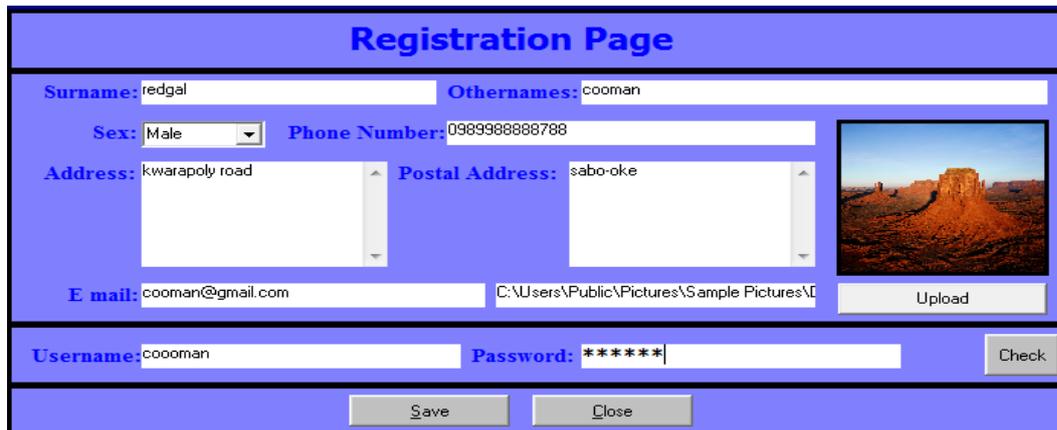


Figure 3.0: Sever Side

Client Execution: A client firstly must have to register itself (figure 4.0) by sending username to the server and should have to start the thread so that system can get the list of all available clients. Then any of two registered clients can communicate with each other.



The screenshot shows a registration form titled "Registration Page" with a blue header. The form contains the following fields and elements:

- Surname:** redgal
- Other names:** cooman
- Sex:** Male (dropdown menu)
- Phone Number:** 098998888788
- Address:** kwarapoly road
- Postal Address:** sabo-oke
- E mail:** cooman@gmail.com
- Image Upload:** A preview of a landscape image with an "Upload" button below it.
- Username:** cooman
- Password:** *****
- Buttons:** "Save", "Close", and "Check".

Figure 4.0: Registration Page

IV.RESULT AND DISCUSSIONS

The result of this research has shown that PC-chat messaging has changed the way people communicate. It allows for immediate interaction as well as constant accessibility for contact between people. The following features of PC-chat are the summary of our findings:

- Abbreviation:** One of the main reasons PC-chat is a popular method of communication is because it is quick. With the comfort, people do not have to leave their room or chair in order to have a question answered (Savicki and Kelly, 2000). Instead, they can easily look up another's profile or away message, and after sending a message, instantly have a response. For some, it seems only natural to increase the speed of communication by neglecting the use of proper grammar within their conversations.
- Broadcasting:** Broadcasting is in essence old school public relations. You decide what you want to say and write it up in a press release (Kindred and Roper, 2004). You then write a Tweet that encourages the viewer to click through an attached link to the web page where your press release is. Although you may decide to monitor the response to a broadcast tweet, feedback does not necessarily guide your future actions (Whittaker and Bradner, 2000). Your primary goal as a broadcaster is to blast your content out there and hope that somebody takes positive action as a result.
- Interaction:** Interaction is a transactional approach to social media. It is basic customer service. Someone posts something about you, your organization or your company and you re-actively respond. Once, you address the concern that is the end of the relationship. The Interaction strategy may or may not include associating individual company team members with the social media brand (Flanagin, 2005). Often, many team members are involved in the transaction, but the customer rarely remembers who they are.
- Away messages:** Away messages, a feature of PC-chat that allows users to post a brief message of their choice that other people on their buddy list can view. Away messages were designed to enable users who were still logged on to their computers but not physically sitting at their machines to alert possible interlocutors not to expect immediate replies (Boneva, 2006). Away messages have become a means of communication that allow people to find out information about other users without actually initiating conversation and speaking with them.

V. CONCLUSION

Quite large number of people are now on social networking sites to create and maintain personal profiles that are linked with others people having similar interests, business goals, or academic courses to share views, ideas and materials that of benefits to them. The PC-chat enables users to perform multiple conversations that is not possible with face-to-face conversations, and much more difficult when on the telephone (Chigozie, Williams and Osegi, 2014). The



ISSN: 2350-0328

International Journal of Advanced Research in Science, Engineering and Technology

Vol. 6, Issue 10, October 2019

presentation facet of PC-Chat gives users the opportunity to create an identity for themselves and express their personality. Features such as away messages provide users with the chance to continually know where other people are and what they are doing, as well as obtain personal information about a user without actually engaging in conversation with them. Away messages also have changed the way users enter into conversation by bypassing traditional customs of language, such as greetings. The changes in language and communication that PC-chat brought have both positive and negative aspects to these changes.

REFERENCES

- Boneva, B. Q. (2006). "Teenage Communication in the Instant Messaging Era". Springer press: New York.
- Chigozie O., Williams P. and Osegi N.E. (2014). "Hybrid Social Networking Application for a University Community"
- Christian D., Arne W. and Anja F. (2003). "An analysis of Internet chat systems". *IMC '03*, October 27–29, Miami Beach, Florida, USA Copyright 2003 ACM 1-58133-773-7/03/0010.
- Flanagin, A.J. (2005). "IM Online: Instant Messaging Use among College Students". *Communication research Reports*. 22, 175-187.
- Kindred J. and Roper S.L. (2004). "Student use of IM to Maintain Personal Relationships". *Qualitative Research Report in communication*. 5, 48-54
- Krant R., Patterson M., Lundmark S. and Scherlis W. (2010). "Internet Paradox: A Social Technology that Reduces Social Involvement and Psychological Wellbeing". *American Psychologist*.
- Nik U. et al. (2015). "SoK: Secure Messaging". *IEEE Symposium on Security and Privacy*.
- Nikita M. et al. (2014). "Design of Chatting Application Based on Android Bluetooth". *International Journal of Computer Science and Mobile Computing*, Vol.3 Issue.3, pp. 712-717.
- Savicki V. and Kelly M. (2000). "Computer Mediated Communication and Group Composition". *Cyber Psychology and behavior*. 3, 817-826.
- Whittaker S. and Bradner E. (2000). "Interaction and Outeraction: Instant Messaging in Action". Paper presented at the conference on computer supported cooperative work.