

LAN Messenger

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Abstract:

This is LAN messenger application; it's a social media project for Final year college students. It is a Client – server application program developed in Visual Studio 2005 (VB .NET). Here the individual can chat with other individual through LAN connection. Even they can exchange file through one computer to other. Administrator can view chat logs through server. Here no need of Internet access. This application can be used in all workplace which is helpful in submitting information and to connect with workplace staff.

Introduction:

A LAN messenger is an [instant messaging](#) program designed for use within a single [local area network](#) (LAN). Many LAN messengers offer basic functionality for sending private messages, [file transfer](#), [chat rooms](#) and graphical [smileys](#). The advantage of using a simple LAN messenger over a normal instant messenger is that no active Internet connection or [central server](#) is required - and only people inside the [firewall](#) will have access to the system.

LAN messenger is an easy to use, server based LAN messaging application for effective communication. It is correctly identified and works under all operating systems with unlimited user accounts and is the only secure messenger. The simple interface makes special training needless.

Literature Review:

The LM uses two-tier client server architecture as shown in figure 1. The application handling is completed separately for database queries and updates and for business logic processing and user interface presentation. Generally, the networks bind the back-end of an application to the front-end, though all tiers can be present on the same hardware. The architecture of any client/server situation is by classification at least a two-tier system, the client is the first tier and the server is the second.

The two-tier design generally encompasses client demanding services undeviatingly from server i.e. client communicates alongside the server without the help of another server or server process (Chandra & Kumar, 2009).

Two sockets are created at the client side and the server side. The client connects to the server through its IP address and port number. They must share the same port number for them to communicate (Reid, 2004). The client and the server both communicate through a stream of bytes written to the socket. The client and the server must agree on a protocol (TCP, UDP or RAW) and agree on the language of the information transferred back and forth through the socket (Umar & Justin, 2003). This study used socket concept to collect message. Basically, the message sent by one staff into a socket and passes it to another staff on the receiving side. If it is group chatting, a central socket will be used to collect the message and then it will be broadcast to all staff that are active.

Goals of LAN Messenger:

Communication: to develop an instant messaging solution to enables users to seamlessly communicate with each other.

User Friendliness: the project should be very easy to use enabling even a novice person to use it.

Bruegge, B and Dutoit, A.H (2000). *Object-Oriented Software Engineering Conquering Complex And Changing Systems*, Prentice Hall, Upper Saddle River, New Jersey Chandra, S.Y and Kumar, S.S (2009). *An Introduction to Client/Server Computing*, New Age International Publishers, New Delhi.

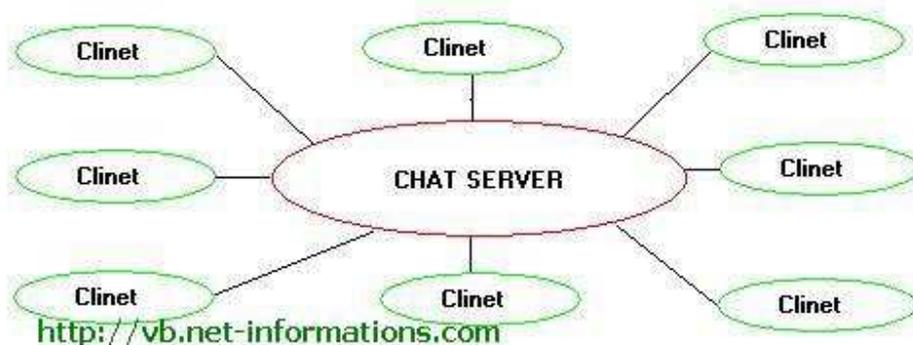
Methodology:

To implement these objectives we use different programming languages like JAVA, Visual Basic, .Net, etc. here we use .Net to implement it.

Software requirement:

1. ASP.Net
2. MS Access

To implement this work we require different module like user module, Administrator Module.

**Conclusion:**

The LM is established as a solution to some communication problems and reduces the use of resources including time factor of an organization's internal communication. The proposed system enables users to communicate on networks outside internet boundaries. LM can be integrated in other application areas such as in school, university and public libraries for communication between library patrons and librarian, in business offices, scientific organizations, and the academe, to mention a few. The proposed system can be a future replacement for many internet chat applications and will cost the organization lesser resources to implement. The strengths of the system identified by this paper are: more communication opportunities within an organization without using an internet subscription; it can work on all Windows platforms provided that the client and server are using the same type of operating system; it provides users to make voice call and send files; it enables connected clients to save their chat conversations; it supports peer-to-peer and server-based modes; user interface is common and familiar; and users may create chat rooms for specific topics or users so if there is any urgent management announcement is

easy to broadcast to everyone at once and to specific persons only. There are other advantages of the system especially when future enhancements would be analysed and implemented.

References:

1. <http://www.softpedia.com/get/Internet/Chat/LAN-Messaging-Clients/Softpedia> category LAN Messaging Clients
2. [Jump up ^ http://www.softsea.com/software/LAN-Messenger.html](http://www.softsea.com/software/LAN-Messenger.html) SoftSea category LAN Messenger
3. [Jump up ^ http://www.aniesoft.com/top-lan-messenger-free-window/](http://www.aniesoft.com/top-lan-messenger-free-window/) Review of Top 10 LAN Messengers for Windows
4. Dusi, M., Crotti M., Gringoli F., Salgarelli, L. (2008). *Detection of Encrypted Tunnels across Network Boundaries. In ICC*. Brescia, Italy: IEEE.