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Chat System for Social Communication

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Abstract:

Chatting is one of the most frequent internet activities. It has become a popular way to communicate. In fact, all major organizations also provide customer service through messages system. Social networking sites like facebook, twitter, yahoo, provides chat services and attaching billions of users worldwide. This gave me a motivation to develop a chat system for social communication, this work consists of planning & developing a chatting system. In a chat system, an increase of the participants leads to confusion of topics and makes it difficult to continue an orderly conversation. Moreover, senior participants tend to be familiar with each other and form a so-called community. This behavior of the senior users consequently makes newcomers hard to participate in the existing rooms. To cope with these problems, this paper proposes a community partition based chat system which divides overcrowded rooms to keep the proper number of participants. The system frequently estimates relationship between participants and separates the community members from the chat room. The separated members thus can continue to communicate with each other in another room newly generated, while the remained participants unacquainted with each other can make a beginning of the conversation. We had made an evaluation experiment on the proposed chat system and could obtain results which agree with the aim of our research. Online chat may refer to any kind of communication overthe Internet that offers a real-time transmission of text messages from sender to receiver. Chat messages are generally short in order to enable other participants to respond quickly. Thereby,

a feeling similar to a spoken conversation is created, which distinguishes chatting from other text-based online communication forms such as Internet forums and email. Online chat may address point-to-point communications as well as multicast communications from one sender to many receivers and voice and video chat, or may be a feature of a web conferencing service.

Online chat in a less stringent definition may be primarily any direct text-based or video-based (webcams), one-on-one chat or one-to-many group chat (formally also known as synchronous conferencing

Key words: chat system, social communication,

Introduction

The purpose of the thesis is to describe in detail the conversational interaction between participants in various forms of online text-based communication, by isolating and analyzing its primary components, Conversational process, according to analysts in many fields of communications is rich in a variety of small behavioral elements, which are readily recognized and recorded. These elements combine and recombine in certain well-ordered rhythms of action and expression. In person-to-person off-line confrontation there result.

A more or less integrated web of communication which is the foundation of all social relations. Online chat rooms as an instance of electronic text-based communication also use many of these small behavioral elements, evolving at the same time system-specific techniques such as emoticons, abbreviations and even pre-recorded sounds provided by the chartroom (whistles, horns, sound bites or laughter). The full web of online exchange and exchange relational modulation devices however remains unmapped, and unless every word written online is captured it never will be mapped and analyzed fully.

WWW is called the World Wide Web. WWW supports many kinds of text, pictures, video and audio. WWW resources

through a web browser which basically a program that runs on the internet. There are two kinds of browsers 1) text only browsers and 2) graphical browsers. Graphical browsers like Netscape Navigator and Internet Explorer are popular. These browsers provide you online images, fonts & document layouts. When you access a WWW server, the document is transferred to your computer and then the connection is terminated. The World Wide Web is a network of information, accessible via an easy-to-use interface. The information is often presented in hypertext or multimedia and provided by servers located around the world. The usability of the Web depends largely on the performance of these servers.

1.1 Problem Statement

Have we ever thought that we can chat with people residing At far of places i.e., remote chatting around the world now we can do this, that's what technology is all about and we can chat with people all over the globe just sitting at we PC, can communicate and share information between different users who are present on their terminals at the time All this can be done through a program called "CHAT" and the thesis is all about chatting to the running networks.

Chatting and Messenger Systems

In (Salin, 2004) authors proposed a Mobile Instant Messaging System where all the friends can chat using their mobile devices. This thesis studies the requirements placed upon instant messaging systems by mobile environments and evaluates the applicability of two instant messaging systems set for introduction in mobile networks in the future.

In (*Bakker*, 2007) author presented a study where he discussed that instant messenger is very much in demand in higher education. It seems that educational institutions have been doing very little with it, while several studies indicate that it could indeed be a valuable tool in education. As a first step

towards a better understanding of the educational use of IM, he wants to gain insights in how students currently use IM and what opportunities they themselves see for the medium. To that end we conducted a survey among students of the Fonts University of Applied Sciences in The Netherlands. A large majority of the participating students indicated using IM for their studies. Also, when asked about their demands for a possible educational implementation, the majority were positive.

Materials and Methods

Socket Programming:

Sockets provide the communication mechanism between two computers using TCP. A client program creates a socket on its end of the communication and attempts to connect that socket to a server. When the connection is made, the server creates a socket object on its end of the communication. The client and server can now communicate by writing to and reading from the socket. The java . net .Socket class represents a socket, and the java . net . Server Socket class provides a mechanism for the server program to listen for clients and establish connections with them. The following steps occur when establishing a TCP connection between two computers using sockets: The server instantiates a Server Socket object, denoting which port number communication is to occur on. The server invokes the accept () method of the Server Socket class. This method waits until a client connects to the server on the given port.

About JAVA:

The Java virtual machine (JVM) is a software implementation of a computer that executes programs like a real machine .The Java virtual machine is written specifically for a specific operating system, e.g. for Linux a special implementation is required as well as for Windows.

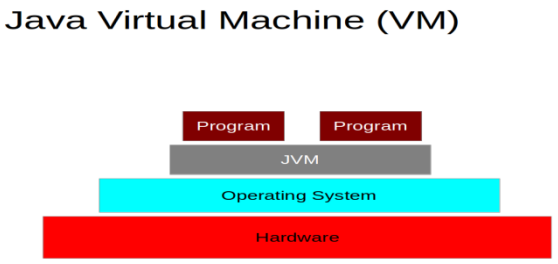

Figure 3.1 Java Virtual Machine(vm)

Software Development Life Cycle

Software development life cycle is a series of identifiable stages that a software product undergoes during its life time. The primary advantages of using a lifecycle model are that it encourages development of software in systematic and disciplined manner. A life cycle model defines entries and exit criteria for every phase. I have used Iterative waterfall model for development of this project .figure 1 shows Iterative waterfall model.

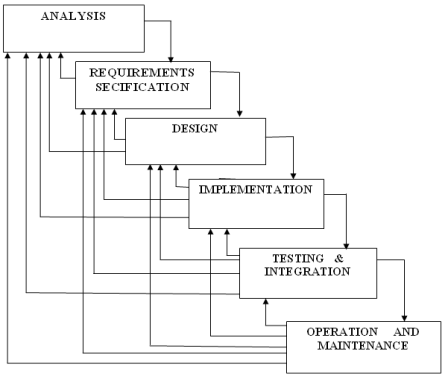

Fig.3.3 - Iterative Water –Fall Model

Security

More secured architecture since the client cannot access the database directly.

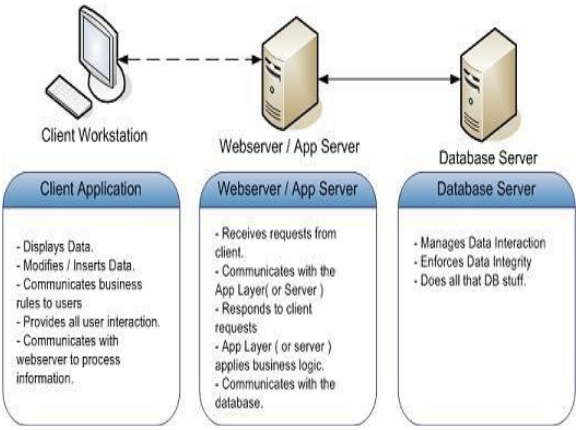

Figure 3.4 Security

Results and Discussion

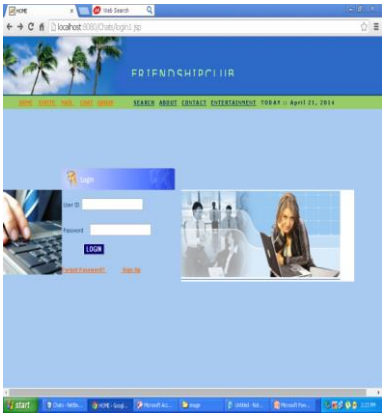

Fig.4.1 Login window of the system to make the user in to the system

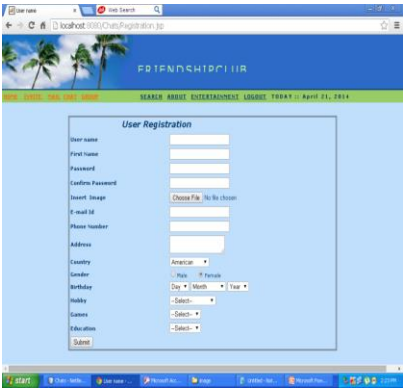

Fig.4.2 The User Registration Window to create new user accounts for login to the system

Discussion:

Criticism of online chatting and text messaging include concern that they replace proper English with shorthand or with an almost completely new hybrid language. Writing is changing as it takes on some of the functions and features of speech. Internet chat rooms and rapid real-time teleconferencing allow users to interact with whoever happens to coexist in cyberspace. These virtual interactions involve us in 'talking' more freely and more widely than ever before. With chat rooms replacing many face-to-face conversations it is necessary to be able to have quick conversation as if the person were present, so many people learn to type as quickly as they would normally speak. Critics are wary that this casual form of speech is being used so much that it will slowly take over common grammar; however, such a change has yet to be seen. With the increasing population of online chat rooms there has been a massive growth of new words created or slang words, many of them documented on the website Urban Dictionary. Sven Birkerts wrote:

"as new electronic modes of communication provoke similar anxieties amongst critics who express concern that young people are at risk, endangered by a rising tide of information over which the traditional controls of print media and the guardians of knowledge have no control on it".

Summary and Conclusions

With the fast development of internet, chatting room has become the most widely used communication tool. In this thesis, I have proposed a multilayer's chat system with protocol securing. In this chat system, any users can chat with thesis friend in the friend list. Friends can be invited a for chatting. This system can be used for sending mail, sending chat messages, invitation, user list etc

Future scope

Can be used in future for voice chatting, can improve security also.

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