



Intranet Caller System

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ABSTRACT

The access to communication technologies has become essential for the handicapped people. This study introduces the initial step of an automatic translation system able to translate visual speech used by deaf individuals to text, or auditory speech. Such a system would enable deaf users to communicate with each other and with normal-hearing people through telephone networks or through Internet by only using telephone devices equipped with simple cameras.

In particular, this project introduces automatic recognition and translation of Speech form one node to another using LAN connection. Human speech is a visual mode used for communication in the deaf society. Using hand shapes placed in different positions near the face as a complement to lip-reading, all the sounds of a spoken language can be visually distinguished and perceived. Speech is the most natural form of communication and interaction between humans; whereas, text and symbols are the most common form of transaction in computer systems. Therefore, interest regarding translation of speech between nodes is increasing day by day for speech oriented human-computer interaction

Keywords: *Intranet, peer to peer network, audio signal, JMF, dial up connection.*

1. INTRODUCTION

Common Mode of Communication

“CELLULAR PHONES”

High Services Rates=“NOT ECONOMICAL!!!”

SOLUTION?????

“VOICE COMMUNICATION USING LAN”

As the name suggests, our project is based on audio transmission & reception. Through our application two or more persons in an intranet can Chat with one another through voice..... In particular, this project introduces automatic recognition and translation of Speech form one node to another using LAN connection. It is a Client-Server type application in which the Server handles all the traffic. The person (from one of the computer in the network) who wants to have audio chat with another person requests to Server & after acceptance of request they can have successful chat or conferencing. The Server (which is a person indeed) have Voice Chatting with the clients.



Why Java platform is used-:

Java is ideally suited to become the standard application development language for wireless devices, providing us with lots of benefits. We choose java platform because of following features-:

- 1. Cross platform compatibility**
- 2. Object Oriented Programming**
- 3. Huge java developer community**
- 4. Security & Dynamic**

2. PROJECT IDEA

In recent years people used to communicate with each other through telephone. Now a days mobile phones are the new version of landline telephone but it takes charges to communicate so we develop this project to reduce the charge and easily communicate with people.

3. PROJECT SCOPE

Voice communication using LAN tools a voice chat engine which currently runs on UNIX systems. With more of multimedia applications emerging, we intend to provide a base VOIP tool with utilities such as secure p2p chats, conferencing and voice recording. This tool works on UDP& TCP protocol using speed audio streaming library which provides low latency, low bandwidth consumption and other enhanced features. Such a voice chat would be a powerful tool for people to communicate. Other applications like online gaming, messengers and LANs can use this tool as backend to support voice communication. Voice communication using LAN tool is different from other existing voice chat engines as it supports server client as well as peer-to-peer chat model keeping traffic encrypted over wire.

4. Literature Survey

The main purpose of bandwidth utilization efficiency is to provide services so that users can get higher data rates and wider coverage. However there is no single network that can provide this kind of services.

4G network is expected to integrate LAS-CDMA, OFDM, MC-CDMA, UWB and Network-LMDS so that higher data rates and wider coverage can be achieved [31]. In this integration, the users will be served by either one of those networks.

As a result, an important problem occurred in which in these overlapping areas most of the network resources is not fully utilized since only one of those networks serve the users. The bandwidth utilization efficiency is so important for operators, because the wireless communication cost and their profit are based on the network resources. Thus, how to get the highest benefit from the available network resources is a key issue in the

wireless communication networks. In the research, we focus on the two bandwidth integration of WLAN and CDMA2000 networks to efficiently utilize the two network resources.

This chapter reviews the relevant literature to explain the existing researches. The flow of the relevant literature is presented in which focuses on the evolution of wireless communication networks and bandwidth utilization efficiently for 4G.

5. SYSTEM ARCHITECTURE

In system, client-server connectivity form with AD-Hoc Network with socket programming. IP address work as primary key for call setup and voice signal transfer from sender to Receiver using mike hardware

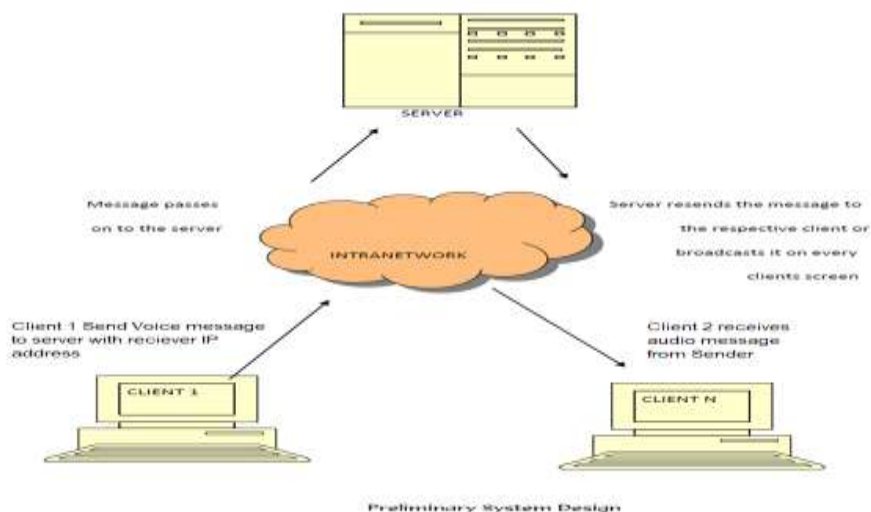


Fig: Architecture Diagram

6. MODULES

- **MODULE NO.1 Authentication module:**

This module is used to authenticate valid user for the system.

- **MODULE NO.2 Device configuring module:**

In this we configure the device which can be connected externally to the system.



- **MODULE NO.3 LAN connectivity module:**

In this module the used to connect computer node to each other

- **MODULE NO.4 Signal Transmission module:**

This module is used to transfer voice signal for source to destination.

- **MODULE NO.5 Call setup and Termination module:**

In this module is used to responsible for call setup and termination activity.

7. GOALS

This document is the Software Requirement Specification for the Voice communication using LAN tool. It describes the features of our tool, Guidelines on how to use it and installation tips. Voice communication using LAN tool is a generic low-latency Voice communication using LAN tool solution meant to be used in computer games, messengers and institute LANs keeping in mind the quality of sound transfer, security and low bandwidth consumption.

OVERVIEW OF DOCUMENT The document begins with defining the overall product, its utilities, features, etc. It then gives the external interface requirements, followed by a brief description of the system features and components. The last section provides the non-functional

8. CONCLUSION

We have described our experiments as an application for audio chat based on Java platform using tools Java Media Framework. A such a system would enable deaf users to communicate with each other.

The overall feeling of the use about the project is great. We all feel satisfied and we hope that we would make a good use of our experience in the future. We thank all those who supported us in carrying out this project.

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This is to great pleasure & immense satisfaction to express our deepest sense of Gratitude & thanks to everyone who has directly or indirectly helped using Completing Project work successfully.

It gives us great pleasure in presenting the preliminary project report on

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