APPLICATION SOFTWARE DEVELOPMENT ON VoIP SYSTEM

Project code: CX1a-01

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In this final year project, we have developed two systems. One is the Homepage System which can connect personal computer (PC) with telephone through a gateway to perform PC to Phone call and Phone to PC call. The other is the Audio Mail System (AMS) that can allow a telephone to send and receive E-mails from the mail server through the gateway.

In setting up the Homepage system, the homepages are written by HTML and Active Server Pages and the gateway software is written by C++ language. For the AMS, it is written in JMAIL application programming interface and Microsoft Foundation Class in C++ programming language.

For setting up the gateway, a gateway software which is programmed with Fusion H.323 and AG4000 board API in Microsoft Foundation Class (MFC) in C++ programming language.

By integrating all the above techniques, we can set up the two systems and run successfully.
**Homepage System**

When client want to send a phone call to other people, an entry field is provided for him/her to enter the telephone number. After the connection has been set up, the telephone will ring as a notice to other side. After the phone has been picked up, client using pc can talk with his/her friend who was on phone. This process can be inverted, that is his/her friend can also use a telephone and dials to the client’s homepage and start conversation with the client.

**Audio Mail System (AMS)**

The Main Program Control is needed to handle all the communication between the Web-base information system and the components of the main system. It controls all the communication between different function of the programs and is the core of our Voice Mail System.

On the other hand, it handles information input into the system database by the web-base system. The Web-base system is an online system that allows the user to register their information and get the ID of our system. The data are then used by the main control program to recognize the user which uses as the input of the login system and the mailbox information for email.

**System Architecture of AMS**
After the client has clicked the DIAL button, the connection between pc and phone will be established and he/she can start communication with his/her friend who is on the phone side.

The telephone number that the client wants to call.

The Internet Protocol (IP) address of the gateway that the telephone is connected to.

"DIAL" button - for making a phone call to a telephone.

"DISCONNECT" button - for disconnecting a phone call when dialing.

The Loginid is in a form of four digits used for identification of the client in the AMS.

Web-based Administration System for the AMS

After the client has entered his/her information and clicked the "Submit" button, there will be a page notified the client that the registration is completed.