

# VOICE BASED E-MAIL CLIENT SERVICE WITHOUT INTERNET

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**Abstract**— “Email in telephone” is a system which will be developed to receive mail with ordinary telephone. The system will be developed to solve the problems like necessity of owning a PC with net connection or tough job of rushing to browsing centers just to retrieve mails. In this system, a dial-up client will receive through the telephone line and authentication number will obtain from him/her. Using that authentication number the system will get to the inbox of the client. The inbox status will read to the buffer. Using a text to voice interface it is fed through the telephone line to the client. The system is expected to develop for the user to access his/her mail box and will be able to hear mails.

**Index Terms**—SAPI, Dtmf Decoder, POP3 Protocol, DataBase, Modem, Web Server, ISP, Serial Port, Text Processing

## 1 INTRODUCTION

The system “Email in Telephone” will help out the people to check mails anywhere at any time in lower cost. In the business prospective the system does not require the have PC or net connection or electricity or mobile to check mail and it is more convenient to use by just dialing through an ordinary phone. And this is the most profitable approach of using Internet towards the business sector.

### Statement of the problem:

There are few problems which are put forward, in many countries still there are many villages without electricity and in many countries people who travel most of the time do not have time to check their mails, most of people feel difficult carry laptops everywhere and feel expensive to get Internet connection. The system will overcome those above issues by checking mails through a phone call.

### Back ground to the problem:

The research idea has emerged by observing the below cases of scenarios where the problem arise,

#### Case 1: No Electricity

In India due to vast development in the field of energy there are shortages of electricity in several areas. Still there is no power in many villages in India. Most of the rural areas have shortage of electricity

#### Case 2: No net connection

Nowadays, in most of the countries people who earn low wages do not have Internet connection in their houses. They feel getting Internet connection will cost more. These people rushes to Browsing center just to check their mails in great frustrations. They can't browse during any time when

needed.

#### Case 3: No PC

Most of business people who travel across are lazy to carry their laptops everywhere. Sometimes they are supposed to take their laptops just for checking mails. Many students feel expensive to buy PC's at home.

#### Case 4: No mobile

In few countries, the middle class people have the necessity of buying mobile with Internet connection to access internet and check their mail everywhere which is luxurious for them.

#### Case 5: No computer knowledge

Children who do not have proper knowledge in computer and feel uneasy to handle computer could not able to check their mail.

### Research Objectives:

Receive E-mail through ordinary telephone

### Research Questions:

- Is it possible to check your e-mail without,
1. Internet connection
  2. Computer
  3. Mobile
  4. Knowledge in computer
  5. Power/ Electricity?

### Significance/ Justification

If the proposed system is used in practice, it reduces the cost of checking mail through browsing centers and more convenient to retrieve mails anywhere at

any time by just making a phone call. The system outcomes will definitely pulls any entrepreneur to buy the system and launch in market and provide service to the people.

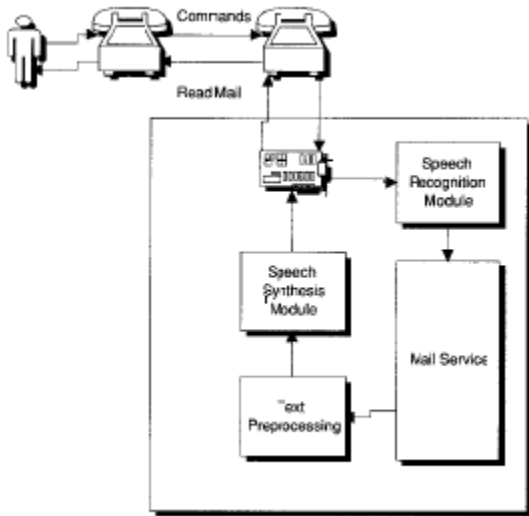
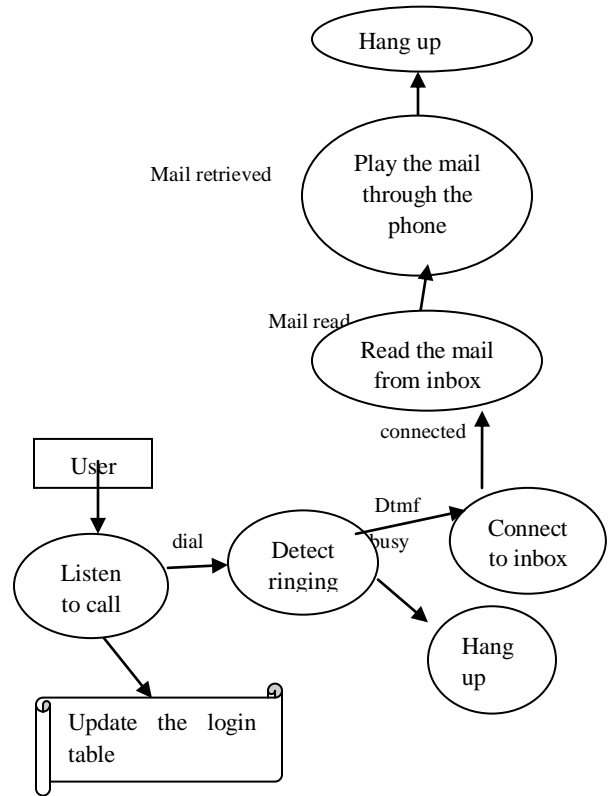


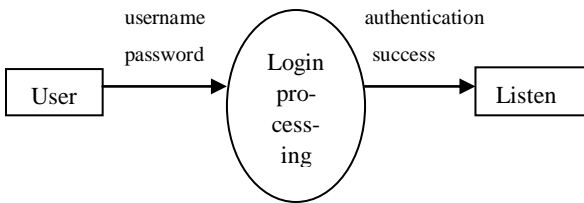
Fig. 1 -The overall system architecture

### 3. System Development:

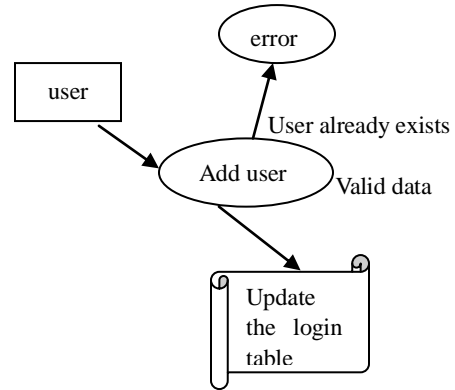
#### LISTENCALL:



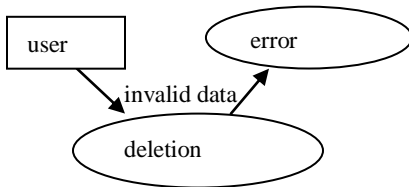
#### LOGIN:



#### ADD USER:



#### DELETE USER:



#### 4. SYSTEM IMPLEMENTATION

##### Research Design

Applied research methodology is used in system. The time scope to develop the system will be 6 months. The system will be developed by gathering secondary data of implementing modest application software which provide qualitative result. The system will be experimented finally on case based in certain scenarios. The systematic sampling method will be applied to the system.

##### Block diagram:

##### DTMF Decoder:

This convert the frequency in to BCD Centronics Port. This is a parallel port, which is used to read the decoded data from the decoder.

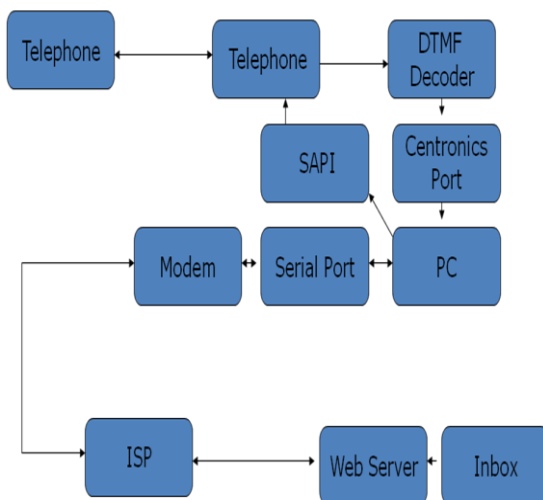
##### SAPI

This is called as Speech Application Programming Interface, which is used to convert the TEXT into SPEECH.

##### Modem

Which Convert the Digital Signal into Analogue Signal.

### Block Diagram



##### Modules Evaluation

##### POP3

The first module is the POP3. This is the step by step procedure to extract the mail from the mail server without getting into the browser. POP3 is intended to permit a workstation to dynamically access a mail drop on a server host in a useful fashion. Usually, this means that the POP3 protocol is used to allow a workstation to retrieve mail that the server is holding for it.

##### SAPI

The second module is related to the Speech Application Programming Interface. The Speech Agent (SAPI) is responsible for delivering email messages through telephone lines employing speech synthesis and speech recognition techniques. A user can connect to the agent by simply placing a call to a phone connected to the PC. Using a standard predefined set of commands (words or sentences), the user can then instruct the agent to read an e-mail, check for new e-mails, delete e-mails, etc.

##### Creation of database

Which find the Alpha Numerical UserId and Alpha Numerical Password from Numerical Id and Numerical Password.

##### SPECIFICATIONS:

##### Hardware

- PC with Internet Connection
- Telephone Line

##### Software

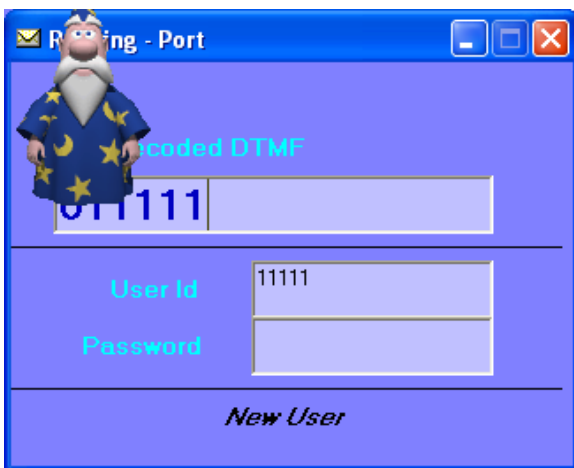
- Windows Xp/2000
- Visual Studio 6.0
- SAPI

### 5. Expected results

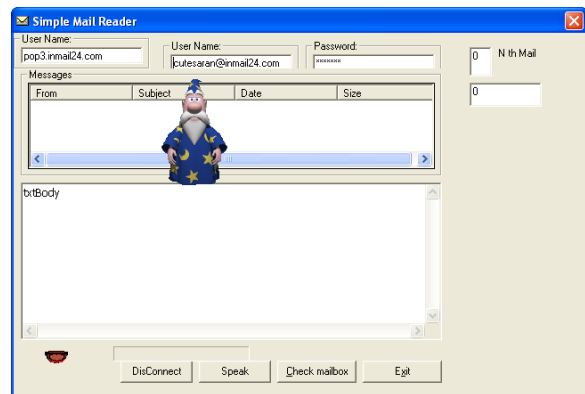
The expected outcome of the system is to retrieve mail for any number of clients mail by just making a telephone call and their mails will be delivered in voice. The system will give a user code to the users who register at mail server in “Email in Telephone”. They will provide numerical username and password to registered user. The system will allow the user to check and delete their mails by providing READ, DELETE or NEXT option delivered by the audio menu. It will let the user to select the options from DTMF telephone buttons, (0-9, #) and assist to hear their mails in voice. Also it will enable the user to change their password. The system will be capable of adding or deleting users from the system. It will be tested in certain categories of user evaluation test, mail retrieval test, speech API test, the system response time and ability to provide service to several clients will also be analyzed and tested in the presentation.

### Obtained results

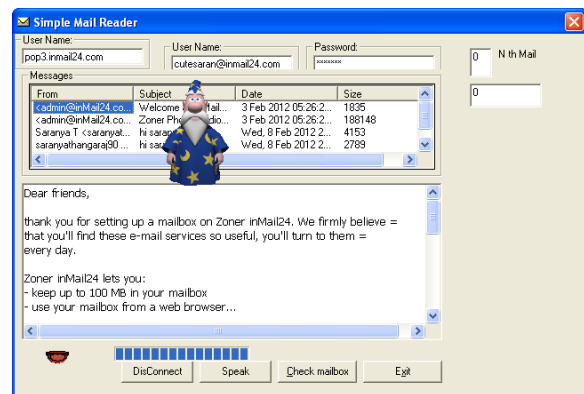
#### Login:



#### Accessing From The Server:



#### Reading The Mail:



### 6. Conclusion

The system “Email in Telephone” will help out the people to check mails anywhere at any time in lower cost. In the business prospective, the system does not require to have PC or net connection or electricity or mobile to check mail .Nowadays, the use of coin-box in Tamil Nadu is being well established, in which we can able to check mails at any time during emergency. In this system, a dial-up client will receive mail through the telephone line and authentication number will obtain from him/her. Using that authentication number the system will get to the inbox of the client. The inbox status will read to the buffer. Using a text to voice interface it is fed through the telephone line to the client.

### **Acknowledgement:**

We would like to thank our professors for their motivation to do this research project. I would also like to thank our parents for their love and support which makes us to do this.

### **References:**

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