Remote File Access using SMS

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ABSTRACT

Due to exponential increase in the information transfer or communication using messages; Short Message Service (SMS) has become important. The efficient and easy to use techniques are being developed for SMS. In the last few years, SMS has made a big impact on the way of communication. Instead of communicating over the phone using voice, people prefer SMS for messaging as well as for information exchange. This paper proposes a method of implementing an extendable generic application which is used to search a file on remote desktop and mail it to user. Mobile users send required information through a SMS to a mobile gateway which then forwards it to the generic application. Using the information send by user, such file name, folder name or drive, email address of the user, the generic application automatically searches the file asked by the user on remote machine and mails it to the user on his email address.

Keyword : *SMS, Parser, GSM, email.*

1. INTRODUCTION

The exceptional growth of the mobile phone market has motivated the design of new forms of mobile information services. With the growth of Twitter, SMSGupShup and other social messaging networks, the past few years have witnessed a growing prevalence of Short-Messaging Service(SMS) based applications and services. SMS-based services are also increasingly common in developing regions. Despite the increasing power of mobile devices with the advent of "smart phones", a significant fraction of mobile devices in developing regions are still simple low cost devices with limited processing and communication capabilities.

Due to a combination of social and economic factors, voice and SMS will likely continue to remain the primary communication channels available for a non trivial fraction of the population in developing regions. For any SMS-based web service, efficient SMS-based search is an essential building block. SMS-based search is a rapidly growing global market with over 12 million subscribers as of July 2008. An SMS message is constrained to 140 bytes which drastically limits the amount of information in a search response. SMS-based search is also non-interactive due to the search response time; anecdotally, existing SMS-based search engines take on the order of tens of seconds to several minutes per response. Even without the 140-byte SMS size constraint, tailoring traditional web search to mobile devices is a challenging problem due to the small form factor and low bandwidth. Unlike desktop search, users on mobile devices rarely have the luxury of iteratively refining search queries or sifting through pages of results for the information they want. In this paper, we address the problem of SMS-based search: how does a mobile user efficiently search the file on the remote machine and get that file on his email.

1.1 Research

Mobile users send required information through a SMS to a mobile gateway which then forwards it to the generic application. Using the information send by user, such file name, folder name or drive, email address of the user, the generic application automatically searches the file asked by the user on remote machine and mails it to the user on his email address. If the file is not available at user's remote machine then user will receive an acknowledgement about those issues.

2. LITERATURE SARVEY

To enable the system to efficiently search for the files and provide user with efficient search result maintaining data privacy at the same time. SMS[2] Parsing is a process of analyzing string of symbols, either in the natural language or in the computer languages, according to the rules of the grammar. Here it is used for separating the different components of the SMS received by the modem.

Google Desktop[1] was a piece of software with desktop search capabilities created by Google for Microsoft Windows, Apple, Mac OS X, Linux systems. Google Desktop allows text searches of a users Web pages viewed, email messages, photos, computer files, chats, music and its ability to display Google Gadgets on the users desktop in the Sidebar.

Downloads were being offered by Google[7] till May 2013. Whereas, in September 2011 they had announced that some of their products, including Google Desktop would discontinue. The reason behind this was that In the last few years, there was a huge shifting of storage and computing from local to cloud-based, and the integration of search as well as gadget functionality into the modern operating systems. Now, people have instant access of their data, whether they are online or offline. And this was the goal of Google Desktop, hence the product was discontinued.

Yahoo! Desktop Search[8], it is a program which can be install on your computer to index and search the contents of your computer. Currently it is available only for computers running on Windows operating system. Yahoo! Desktop Search provides three major components: a crawler which builds an index of the content in the computer, the taskbar that is a taskbar toolbar and local web server which displays the user interface in a browser. Quick Search is a free local search tool to help users quickly locate files or folders instantly by key words. For the Windows Search, it is much faster and easy-to-use alternative.

Quick Search uses a search filter to limit search range and minimize the search results for higher working efficiency with an intuitive interface. Quick Search is the improved desktop search tool which bypasses Windows Search with an intuitive interface, including search box and real-time display panel for the _les as well as folders found in your local hard drive or sub-folders. On lighting quick interface of Quick Search[8], two major controls are available: search box and real-time display panel. When particular file name, subject or keywords is typed into its search box, the resulting screen displays the appropriate _les related to that information. This information may be the Path, Size, Name, Attributes etc. Whats more, Quick Search will display all documents inside the selected folders.

3. SPECIFICATION

3.1 Proposed System

This work proposes a System for mobile users send required information through a SMS to a mobile gateway which then forwards it to the generic application. Using the information send by user, such file name, folder name or drive, email address of the user, the generic application automatically searches the file asked by the user on remote machine and mails it to the user on his email address. If the file is not available at user's remote machine then user will receive an acknowledgement about those issues.

3.2 System Architecture

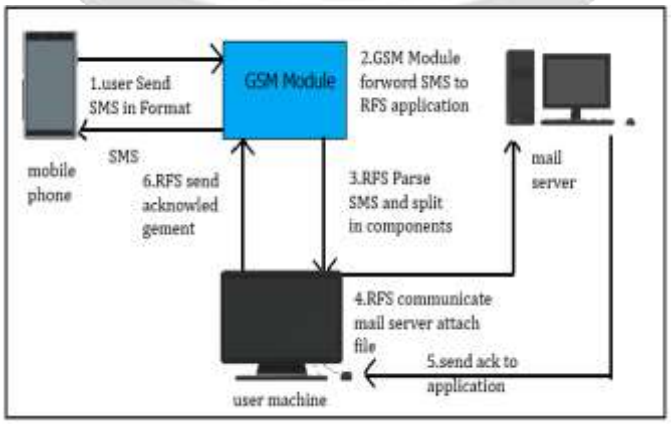

Fig-1 Architecture of System

To search a file and send it as email, the proposed method uses a GSM/GPRS modem and a SIM card to send messages to any mobile network. The cost of the sending message is based on the message tariff subscribed with the SIM card. The proposed application interacts with microcontroller of the modem and uses the sole command used to interact with the network provider of the SIM card.

4. REQUIREMENT ANALYSIS

4.1 Functional Requirement

A. User Registration

New users are registered or create account for accessing the files using SMS.

B. SMS Parsing

Parsing is a process of analyzing string of symbols, either in the natural language or in the computer languages, according to the rules of the grammar. Here it is used for separating the different components of the SMS received by the modem.

C. File Searching

For getting the accurate result for the _le asked by the user through SMS. File searching is an important function which decides the accuracy and correctness of the application.

D. Email API

An email API (application programming interface) gives applications access to the functionality available in an email platform, such as generating and sending transactional emails, manipulating templates, and enabling access to email metrics. Use email API to attach the file and mail it to requested mail id.

5. CONCLUSION

In this paper the concept of searching a particular file on a remote machine through SMS is defined. Each User can search any kind of file and get it mailed on the desired mail id. The specific requirement of this paper is that the application should be installed on remote machine where the file needs to be searched and internet connection should be available for getting the required file mailed or uploading and downloading to the FTP server. In the initial phase of the paper, Remote File retrieving through an SMS will include searching, uploading and downloading of one file at a time. Future release of this application will also allow multiple files to be searched, uploaded and downloaded.

6. ACKNOWLEDGEMENT

We sincerely express our deep sense of gratitude towards our respected Prof. Ranjana Dahake. For her valuable guidance, profound advice, persistent encouragement and help during the completion of this work. Her time to time helpful suggestion boosted us to complete this task successfully.

We express our thanks to our Paper Coordinator Dr. Kalpana Metre for her kind cooperation. We extend our sincere thanks to Our Head of Department Prof. Namita Kale for providing all kinds of cooperation during the course.

Finally we are thankful to the supporting staff of Information Technology department and all those who directly or indirectly contributed to complete this work.

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