International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395 -0056
Volume: 04 Issue: 03 | Mar -2017 www.irjet.net p-ISSN: 2395-0072

OFFLINE SMS INTERNET

V.Baarathi[1], T.Balaji[2], A.T.Navin Prasad[3], M.Jansirani[4]

[1]*Student, Dept. of Electronics and Communication Engineering, Panimalar Institute of Technology, Tamil Nadu, India*
[2]*Student, Dept. of Electronics and Communication Engineering, Panimalar Institute of Technology, Tamil Nadu, India*
[3]*Student, Dept. of Electronics and Communication Engineering, Panimalar Institute of Technology, Tamil Nadu, India*
[4] *Assistant Professor Dept. of Electronics and Communication Engineering, Panimalar Institute of Technology, Tamil Nadu, India*

Abstract - *In Remote areas, Situation might arise there is no internet connectivity but an availability of a telecom signal. In these scenario emergency updates and internet search function will not be utilized, which may create an inconvenience in this digital era. In that case the proposal of internet access through telecom SMS will be very much effective. The USB Modem will be acting as a server. The mobile handset will be acting as client, through which we can make internet queries through SMS text format using Python and Android Application.*

Key Words*: *Internet access through telecom SMS, USB Modem, Internet Query, Python, Android.

1. INTRODUCTION:

In Remote areas, Situation might arise that there is no internet connectivity but an availability of telecom signal, this situation will create an inconvenience in this digital era. To solve this inconvenience we proposed a project that Internet can be accessed through telecom SMS.

This can be done by using USB Modem which acts as a SMS server, PC connected to Internet will act as a Web server and Python is used to interface SMS Server and Web server and for HTML parsing and Android application in the mobile handset will act as a client through which we can make internet queries through SMS text format.

In this the URL sent by the android application in the SMS format to the Server is recognized by python and it collects the information from the web server and performs HTML parsing and sends messages to the Mobile handset and the Android application in the handset will receive the SMS and converts the SMS to the HTML and open the web page in a web browser.

2. BLOCK DIAGRAM:

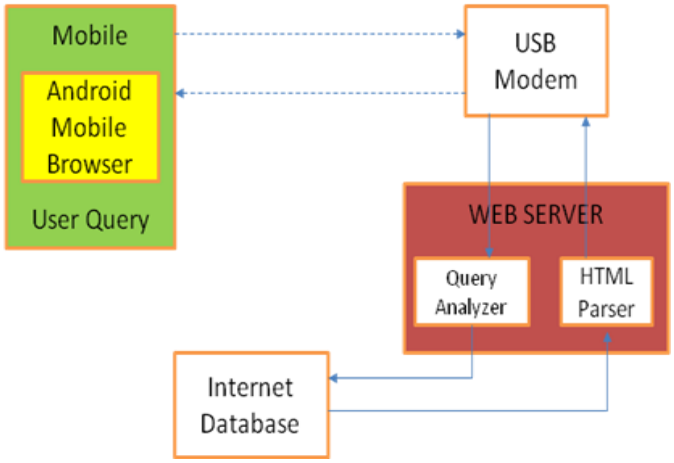

Fig. 1. Block Diagram

3. MODULE DESCRIPTION:

3.1. USB MODEM:

USB Modem acts a Server / Service provider / GSM Modem. It is a modem which can be connected to a PC or laptop as a service provider and a Modem for Internet Access. Modem is controlled by AT commands.

Some of the AT commands are,

1. AT+CPAS
2. AT+CREG
3. AT+CSQ

Fig. 2.1. USB Modem

3.2. PYTHON:

Python is a widely used high-level, general-purpose, interpreted, dynamic programming language. Its design philosophy emphasizes code readability, and its syntax allows programmers to express concepts in fewer lines of code than possible in languages such as C++ or Java.

In this Python is used for HTML Parsing. HTML Parsing means taking in HTML code and extracting relevant information like the title of the page, paragraphs in the page, headings in the page, links, bold text etc. It can be easily done in Python.

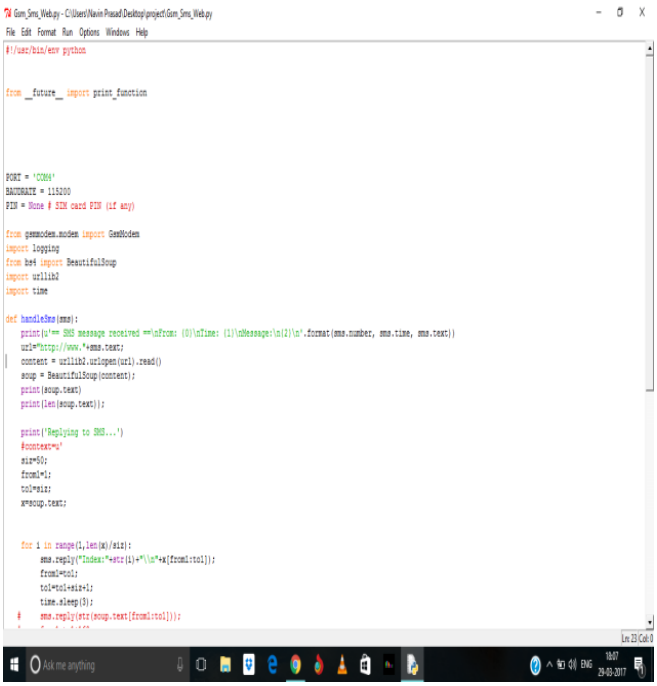

Fig.3.2. Python program

3.3. ANDROID APPLICATION:

Applications ("apps"), which extend the functionality of devices, are written using the Software Development kit (SDK), often, the Java programming language.

Android has a growing selection of third-party applications, which can be acquired by users by downloading and installing the application's APK (Android application package) file, or by downloading them using an application store program that allows users to install, update, and remove applications from their devices.

Here Android Application in the Mobile Handset is used to send and receive the SMS queries and Internet Queries.

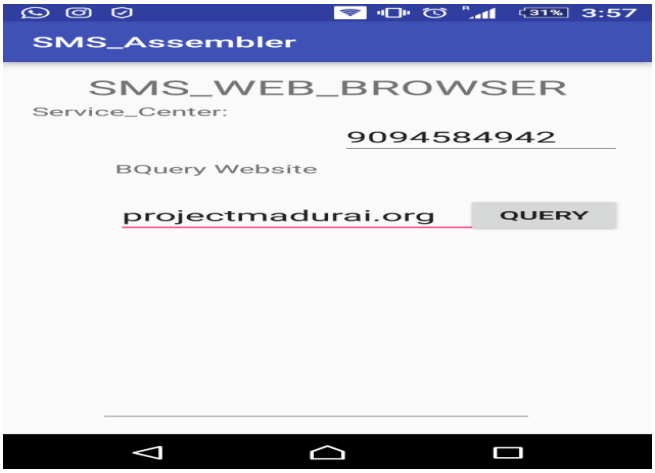

Fig.3.3. Android Application

4. CONCLUSION:

First, the Python program is executed, and the Query is sent from the Android Application to the server which is recognized by the Python software.

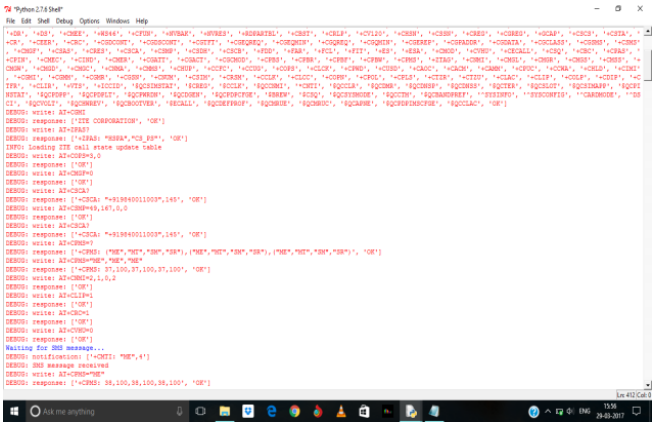

Fig 4.1. Waiting for SMS

After receiving the SMS, the python collects the information of the given URL from the Web Server.

Fig.4.2. Information of the web page

Then the HTML parsing is performed and the messages are divided and it is sent to the client (Mobile Handset) from the Server.

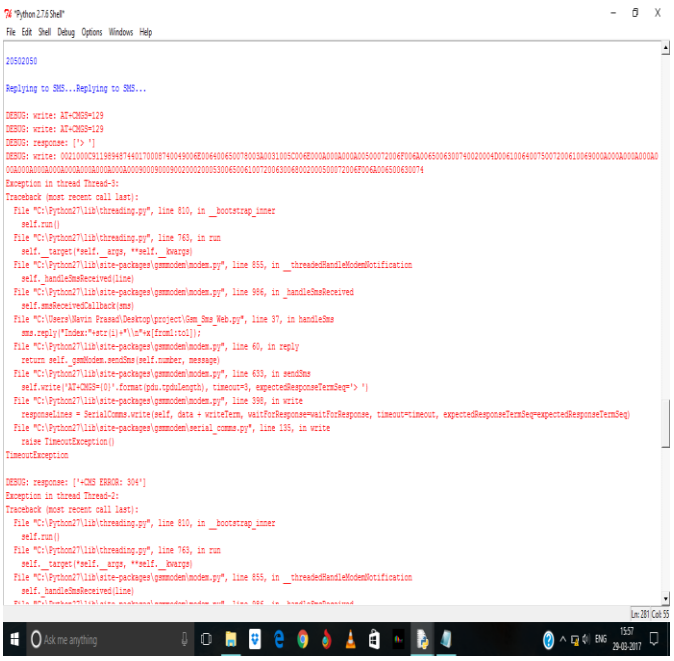

Fig.4.3. Replying to the messages

Therefore the Android Application collects all the messages and merges and it converts it to HTML and open it in a web browser in the Mobile.

REFERENCES:

(1) Fang Yuan, Guang-Yi and Bo-zhen Cai "Android SMS encryption system based on chaos", 2015 IEEE 16TH International conference on Communication Technology.

(2) Yoppy Sazaki, Megah Mulya; Mely Arisandi "The development android-based SMS security software using ECDSA with Boolean permutation", 2016 2nd International Conference on Wireless and Telematics (ICWT)

(3) D.Skvorc, M.Orsic, S. Gros "Android-powered web server for volunteer-based environment sensing", 2015 38th International Convention on Information and Communication Technology, Electronics and Microelectronics(MIPRO)

(4) Kevin Paul, Sheri Mickelson, John M.Dennis "A new parallel python tool for the standardization of earth system model data", 2016 IEEE International Conference on Big Data.

(5) Suraj B. Karale, G.A. Patil "Extracting brief note from Internet newspaper", 2016 3rd International Conference on Computing for Sustainable Global Development.

(6) Md.Shams Arman Rupok, Maruf Ahmed, A.R.N.M Reaz UI Haque, "Design and Implementation of a novel remote metering system using USB Modem", 2011 3rd International Conference on Electronics Computer Technology.

BIOGRAPHIES:

V. Baarathi is currently studying Electronics and Communication Engineering at Panimalar Institute of Technology in Chennai (2013-2017).

T. Balaji is currently studying Electronics and Communication Engineering at Panimalar Institute of Technology in Chennai (2013-2017).

A.T. Navin Prasad is currently studying Electronics and Communication Engineering at Panimalar Institute of Technology in Chennai (2013-2017).

M. Jansirani is currently working as assistant professor (Electronics and Communication Engineering) at Panimalar Institute of Technology in Chennai (2013-2017).