

# Short Message Service: Offline Notification System through Bulk SMS for Android Application

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**Abstract**— In this paper we have implement offline notification system through Bulk sms for android application. Short message service is a message technology (only for mobile) that enables the sending and receiving of messages between any mobile phones. Bulk Messaging is the dissemination of large numbers of SMS messages for delivery to any mobile phone terminals. It is used by media companies, enterprises, banks, colleges and consumer brands for a variety of purposes including entertainment, enterprise and mobile marketing. for also purpose of notification system. Bulk messaging is commonly used for alerts, reminders, marketing, and notification but also for information and communication between both staff and customers. Bulk messaging lets you deliver SMS messages to mobile handsets almost anywhere in the world.

**Keywords**— GSM, SMS, ETSI, GCM

## I. INTRODUCTION

Short Message Service: first beginning in Europe in 1992. It was included in the GSM (Global System for Mobile Communications) standards right at the beginning. Later it was ported to wireless technologies like CDMA and TDMA. The GSM and SMS standards were originally developed by ETSI. ETSI is the abbreviation for European Telecommunications Standards Institute. Now the 3GPP (Third Generation Partnership Project) is responsible for the development and maintenance of the GSM and SMS standards.

There are a number of options these days that allow you to purchase bulk SMSs. As it is known, there are a number of benefits that an individual can be on the receiving end of on purchase of bulk SMSs. Some of these benefits include-

1. Cost effectiveness,
2. Less amount of telephone bill at the end of the month,
3. Option of sending SMSs online
4. Option for creating SMSs online
5. Sending international messages at cheap rates, etc

The Importance of SMS Sites:

The best website amongst the newly formed and already existing SMS package selling sites, provide for sms packs at the most competitive of rates. Bigger the SMS pack, lesser is the cost incurred per sms. These sites hold huge level of importance both for personal uses and for professional uses.

• Importance for Personal Use-

Be it students or any other individuals the need for texting has always been there. Texting has become the root to

proper communication and hence is exchanged in large amounts. Hence these sites provide people with cheap rates per SMS.

• Importance for Professional Use-  
SMSs have grown to be a potent part of marketing and promoting businesses. As a result messages need to be sent out in bulk. These bulk sms services have provisions for sending out huge amount of messages to individuals in the very least amount of time as well as cost.

## II. PUSH NOTIFICATION SYSTEM

Today we use the method of this GCM for push notification system in the Android mobile phone. In this system require internet between two android mobile users. Push notification systems are similar in design to client-server architecture models. The basic structure of a push notification system is divided into three parts:

1. An application that will receive data/instructions.
2. A third party service that will provide instructions or information for the application,
3. A service  
e.g. Google Cloud Servers, Apple Push Notification Service, etc. these services that handles the exchange of information between the two.

## III. PROPOSED WORK

Bulk SMS Gateway service is a software application or web based application that is used to purpose of send SMS messages in number of many people from the computer via the mobile network. It bulk SMS service allows one SMS message to be sent out to a number of large people or a great amount of SMS messages with different contents to be

delivered to many people. Large companies, Offices, colleges and corporations send out SMS messages in bulk gateway for the sake of efficiency and to save time and money.

Bulk SMS indicates sending quick and short emails to a many people. The number may vary via hundreds to be able to thousands. The identical message is shipped to all individuals contained in a list. This service is frequently used for sales promotion and then for advertising services and products. For instance, you can inform people of a future event, just like a concert or even the launching of the new gadget. However, generally these messages are sent to consumers whom volunteered being among the list of clients of any organization or business. Voluntary mail messages may inflame prospective client and is interpreted while harassment

#### IV. RESEARCH METHODOLOGY

AS OF DECEMBER 2013, there were approximately 130 million Smartphone users in India (as December 2013 serve): In the server there are 103 million in urban areas and 27 million in rural areas. India is expected to reach an additional 207 million Smartphone users in 2014 ([www.theguardian.com/technology/2014/jan/13/smartphone-explosion-2014-india-us-china-firefox-android](http://www.theguardian.com/technology/2014/jan/13/smartphone-explosion-2014-india-us-china-firefox-android)). In India Around 800 million mobile apps were downloaded in India in 2013, but the numbers are growing rapidly and should reach a staggering 8 billion annual downloads by 2016 ([www.businessworld.in/news/business/it/the-apps-business/1262330/page-1.html](http://www.businessworld.in/news/business/it/the-apps-business/1262330/page-1.html)).

But in India, this is a very slow Internet network development. All villages are facing the problem of internet. In today what's app, Face book Messenger, Hike etc this application is very popular .but this android application is need for the internet is too. Suppose we have considered the example of messenger. If you sent a message to your friend but this friend need to internet for reading this message. If you put it in the Bulk SMS service in the application. Where it will be convenient to good option. And we have to message without internet

#### V. SYSTEM NEED

We have discuss about need of system for offline notification through bulk SMS for Android Application. Today, in India there are 130 million people using the Smartphone. But the Internet is a matter. Because of the Internet increases the rate, Network problem etc today, in India android application are very popular e.g. Facebook messenger, what's app, Hike, We chat etc. These all application is required internet purpose of notification. If the internet is lost then does not meet the message. But there you have the option of Bulk SMS. Bulk SMS is best

Option for receiving the message as well as Notification. And if internet connection is available then you have to off the Bulk SMS messages on your android application.

#### Why Bulk SMS?

In comparison with other available options for delivering messages to prospects or already existing clients, bulk SMS service works out to be very affordable. Think about the expense of making telephone calls for you to hundreds of men and women and which it would take doing the needful. And then, you can't make sure if the referred to as party will receive your get in touch with and thus get informed of the approaching event. Thus, you save plenty of man hours along with the expense of creating calls. By means of the services of a provider of Bulk SMS, it is possible to send the message to be able to clients regardless of whether they are in different parts of the entire world. Well, getting in touch with people upon phone are often more successful compared to sending SMS, particularly when you are looking for new clients, but individuals would get an SMS to be a smaller amount intrusive and never so time-consuming as well. The most useful feature of your SMS is that the message gets documented in the cell phone of the stereos, allowing them to go through it at their benefit.

#### VI. SYSTEM ARCHITECTURE

Bulk SMS Software is a software application or web based software application that allows sending out mass SMS text messages from computer PC via a GSM device or the Internet network connection. Bulk SMS software products enable you to send tons of SMS messages simultaneously to different recipients or different users.

See the following system design architecture of offline notification through bulk SMS for Android Application. In this architecture firstly User register to bulk SMS service then next authenticates, validates and process.

The user request and sends an auto response through SMS to SMS server then next user can send bulk message by using mobile registration number using android application database. This time user required a sender ID of application. After the GSM model receives the message from the mobile devices and passes messages are delivered on the mobile device. Mobile device can also query the database By sending in a text message. See the following API of Bulk SMS Purpose of Sender ID.

#### Bulk messaging API

Most and commonly Bulk Messaging services utilize the following standard API's (Application Programming Interface). This allows programmers to add sms functionality to any program.

FTP (File Transfer Protocol)  
 SMPP (Short Message Peer to Peer)  
 HTTP and  
 Email



In this system we have also include the On/Off notification system in your application. Because of if your internet is working then you have off the bulk sms notification and if your internet is not working then you have on the bulk sms notification system.

[7] [http://www.developershome.com/sms/smsIntro.asp#1.1.What%20is%20SMS%20%28Short%20Message%20Service%29\\_outline](http://www.developershome.com/sms/smsIntro.asp#1.1.What%20is%20SMS%20%28Short%20Message%20Service%29_outline)

## CONCLUSION

Bulk SMS application system is the One of the most efficient ways of direct communication across any network. It can be done using a simple computer in the network. Online Bulk SMS software application and help available by the Bulk SMS service providers. Bulk SMS Can is synchronized with Android phones. You can check replies also in your in-box or you have also off the On/Off Bulk sms Notification. In addition to all these features, there are hundreds of other features that the service providers offer to help the users

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