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SOFTWARE

REQUIREMENTS

SPECIFICATION

FOR

SMS SERVER IN COMMINICATION

DOMAIN

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1. INTRODUCTION
   * PURPOSE

An SMS message is also called a text message. SMS or Short Message Service is the standard messaging service used on most mobile phones. It uses standardised communication protocols **to send text messages between phones** - it's low cost and ideal for businesses to use for sending short messages to clients.

* + DOCUMENT CONVENTIONS

Text messaging has changed the way of society. People on average send more texts than ten years ago and this is due to the convenience of messaging as it is instant and easy to communicate as every mobile phone has the messaging services. We are now able to send photos, videos and voice notes on message. This is influenced by the conventions because when text messaging came around, we were only able to send message with letters only. whereas now we can have a full conversation as if we were on the phone because people can hear our voice and still understand the emotion of the text. Another way the conventions can be expressed is by the new form of messaging which is emojis. These are symbols which have faces on them and flags which represent emotion.This has became so popular that now when you purchase an apple iPhone and any apple device, one of the languages available is the Emoji. Another form influenced by the conventions of the new society is 'Text language' this is when people shorten words but still have the same meaning.

* + INTENDED AUDIENCE AND READING

SUGGESTIONS

This project follows the domain of the role of Short Messaging Service in the communication parameter. This composition is for the consumers like developers, clients, staffs, mentors, users, documentation writers. The former is about the scope, purpose and the total summary of the sms communication. The readers who access this must have texted sms.

* + PROJECT SCOPE

SMS provides simple and cost-effective way of communicating with customers, but the benefits go far beyond that. Which is exactly why it remains an essential part of communication and marketing strategies. SMS is a simple technology initially used to facilitate person-to-person (P2P) communication.

* + REFERENCE

Other sources or documents or websites where the knowledge can be gained about this domain are

* + <https://en.wikipedia.org/wiki/SMS>
  + <https://www.developershome.com/sms/sms_tutorial.asp?page=basicConcepts>

2. OVERALL DESCRIPTION

* + PRODUCT PERSPECTIVE
  + SMS, which stands for Short Message Service, is the text messaging service on most mobile phones and other mobile devices. SMS is based on standardized communication protocols to send text messages from device to device. The standardized nature of SMS is the primary reason that it’s the most ubiquitous text messaging service.

SMS is ideal for sending short, text-only messages. We’ll get into the pros and cons shortly. But SMS is a cost efficient and widely available media for sending text messages

* + PRODUCT FEATURES

This section describes general procedures for using SMS features from the test set's front panel.

* [Mobile Originated Point-to-Point Message Transfer](https://rfmw.em.keysight.com/rfcomms/refdocs/wcdma/wcdma_gen_op_overview_sms.html" \l "BABBHBEH" \t "_blank)

* [Cell Broadcast Message Transfer](https://rfmw.em.keysight.com/rfcomms/refdocs/wcdma/wcdma_gen_op_overview_sms.html" \l "BABBCBJE" \t "_blank)

* [Cell Broadcast Updated Message Transfer](https://rfmw.em.keysight.com/rfcomms/refdocs/wcdma/wcdma_gen_op_overview_sms.html" \l "BABCJGFI" \t "_blank)
* OPERATING ENVIRONMENT
* Short Message Service (SMS) is the most basic communications technology for mobile data transfer and is characterized by **the exchange of short alphanumeric text messages between digital line and mobile devices**. SMS messaging's key influential factor is affordability.
* DESIGN AND IMPLEMENTATION CONSTRAINTS
* Texting, or SMS (short message service) is a method of communication that sends messages between cellphones (SMS or SMPP) — or from a PC or handheld to a cell phone (SMTP). The “short” part comes from the maximum size of a text message, which is 160 characters (letters, numbers or symbols in the Latin alphabet) regardless of phone, provider, or technology.
* The SMS concept was first developed in the Franco-German GSM cooperation in 1984 by Friedhelm Hillebrand and Bernard Ghillebaert. The first text message was sent years later on December 3rd, 1992 from Neil Papworth, a former developer at Sema Group Telecoms. Mobile phones didn’t have keyboards at the time, so Papworth had to type the message on a PC. Papworth’s text — “Merry Christmas” — was successfully sent to Richard Jarvis at Vodafone.
* Most early GSM mobile phone handsets did not support the ability to send text messages. The first SMS gateways for cellphones were network notifications, usually to inform of voice mail messages and billing alerts. Nokia was the first handset manufacturer whose total GSM phone line in 1993 supported user-sending of SMS text messages. In 1997, it became the first manufacturer to produce a mobile phone with a full keyboard: the Nokia 9000i Communicator.

3.SYSTEM FEATURES

Bulk SMS and MMS. With high throughout and premium service, an SMS broadcast sends large amounts of text messages and multimedia messages (MMS) at one time. ...

Two-way texting. ...

Email-To-SMS. ...

Dedicated virtual number. ...

Plugins and API integrations. ...

Contact List. ...

Automate SMS

|  |  |
| --- | --- |
|  |  |

4.EXTERNAL INTERFACE REQUIREMENT

The Now SMS & MMS Gateway requires a connection to an SMSC (Short Messaging Service Centre), or SMS service provider, to interface with SMS and MMS networks. An SMSC connection can consist of one or more of the following:

**Android Phone** – An active SIM card is required.

**GSM Modem** – A GSM modem connected to a serial port or USB port. An active SIM card is required.

**SMPP** (Short Message Peer to Peer Protocol) – A TCP/IP connection over the internet or a private network to a service that supports v3.3 or v3.4 of the SMPP protocol.

**UCP/EMI** (Universal Computer Protocol / External Machine Interface) – A TCP/IP connection over the internet or a private network to a service that supports v3.5 or higher of the UCP/EMI protocol. UCP/EMI is primarily implemented by CMG SMSCs.

**CIMD2** (Computer Interface to Message Distribution, version 2) – A TCP/IP connection over the internet to a service that supports the CIMD2 protocol. CIMD2 is implemented by Nokia SMSCs.

**HTTP** (Hyper Text Transport Protocol, e.g., the standard protocol for the “web”) – A TCP/IP connection over the internet or private network to a service that accepts SMS messages via an HTTP “GET” based protocol.

This SMSC connection is required to utilise NowSMS. Without an SMSC connection, NowSMS is not able to send or receive messages (although very limited functionality is still available for specialised laboratory environments for phone testing).