
Applications send and receive SMS with Visual Basic 6.0

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ABSTRACT

Communication technology has become an important part of various areas of life. Because of the many conveniences offered, communication technology can hardly be separated from various aspects of human life. With the rapid development of communication technology, it has had a positive impact on society. In addition, communication technology is capable of shortening distances, saving costs, and being able to penetrate space and time. Short Message Service or better known as SMS is now widely used by the public as a communication tool. The advantages of SMS are low cost, fast and direct to the destination. Starting from children, teenagers, adults to the elderly, almost all of them take advantage of this SMS technology. Initially, SMS was only used for interpersonal communication. But now with the times, SMS users are growing. For example, for polling an audition, accessing lecture scores, sending criticism and suggestions to the mass media for publication and many other uses. To be able to do these things, of course, support from adequate software & hardware is needed.

Keywords: *Short Message Service, GSM Modem, VB.6.0*

1. Introduction

Today's rapidly developing communication technology has encouraged acceleration in various fields. This has also led to the emergence of advances in software and balanced with advances and sophistication of technology and hardware. Directly or indirectly, communication technology has become an important part of various fields of life. Because of the many conveniences offered, communication technology can hardly be separated from various aspects of human life. With the rapid development of communication technology, it has had a positive impact on society. In addition, communication technology is capable of shortening distances, saving costs, and being able to penetrate space and time.

Short Message Service or better known as SMS is now widely used by the public as a communication tool. The advantages of SMS are low cost, fast and direct to the destination. Starting from children, teenagers, adults to the elderly, almost all of them take advantage of this SMS technology. Initially, SMS was only used for interpersonal communication. But now with the times, SMS users are growing. For example, for polling an audition, accessing lecture scores, sending criticism and suggestions to the mass media for publication and many other uses. To be able to do these things, of course, we need the support of adequate software & hardware.

Maybe many people think that to make an SMS application it requires complicated and expensive software & hardware. Even though we can make it relatively

easily & at an affordable cost. To make a simple SMS application, we only need a PC or Laptop Pentium IV and above that has a COM port and is equipped with Visual Basic 6.0, a minimum of 512 MB RAM, a GSM Modem that supports AT Command, an active GSM SIM Card, GSM Modem Driver and system Windows XP operation.

Today, people prefer SMS as a communication bridge that connects communication devices (in this case cellphones) with computer devices, which makes SMS activities easier and more enjoyable. Understanding SMS then leads more to a program that communicates between computer operating systems, with communication devices installed to send or receive SMS. One of the communications that occur, can be done by sending an AT command on the communication device, then the results of the operation are sent back to the computer.

The SMS application is divided into several types of categories according to user needs. The types of SMS applications, including: (a) Premium SMS: is a Short Code Number (SCN) service for various programs. The program here can be in the form of quizzes, polls, and others. Usually this type of application is marked with a destination number that has a short number, such as 9090, 6287, 6288, and so on. (b) SMS Blasting: is an SMS that is sent in bulk by the provider to mobile phone users. Usually this SMS is used as a medium of information and advertising. (c) SMS Pull: This SMS is a two-way SMS. Almost the same as Premium SMS, the difference is that SMS Pull will get a reply if the user sends it to the destination number, for example 6288, 9090 and so on. For example, when you support one of your idols in a television show. (d) SMS Push : This type of application has a one-way service. We just need to send one message to join a program (register), then this system will send SMS regularly. For example every day, every week and will continue to be sent until we exit the program. (e) SMS Gateway: is a two-way communication, sending and receiving, used for SMS keywords, polls or other information. This SMS is usually used using a GSM card, and the tariff is adjusted according to the card.

2. Methodology

The waterfall method or what is often called the waterfall method is often called the classic life cycle, where it describes a systematic and sequential approach to software development, starting with the specification of user requirements, then continuing through the planning stages.), modeling (modeling), construction (construction), and delivery of the system to customers / users (deployment), which ends with support for the complete software produced (Pressman, 2012).

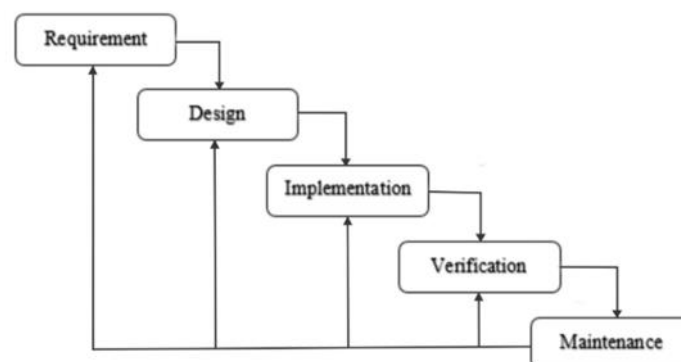


Figure 1. Waterfall Method

In its development, the waterfall method has several sequential stages, namely: requirements (needs analysis), system design (system design), Coding (coding) & Testing (testing), Program implementation, maintenance.

3. Results and Discussion

3.1. Display SMS Xpress

This SMS Xpress display contains several menus consisting of several sub-menus for sending and receiving SMS.

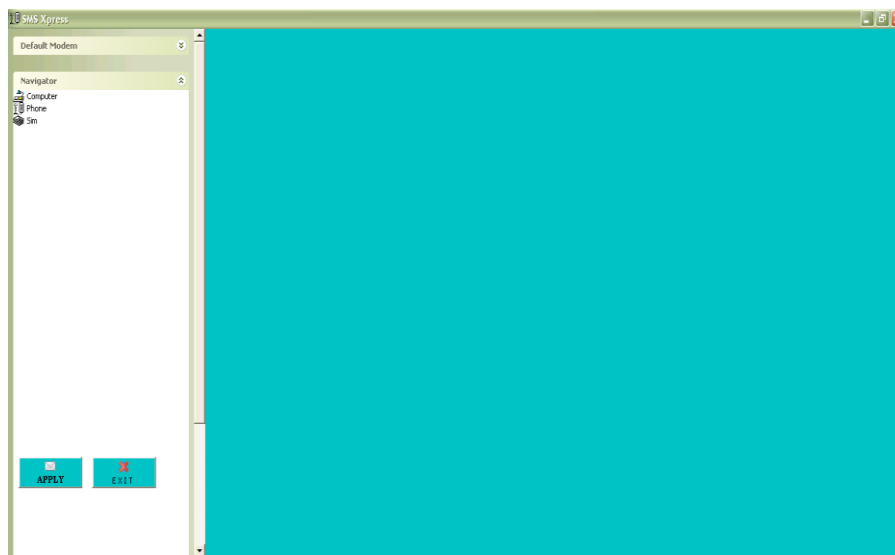


Figure 1 SMS Xpress Layout

3.2. Display Send New SMS

This Send New SMS display is used to send SMS messages to the destination based on the phone number.

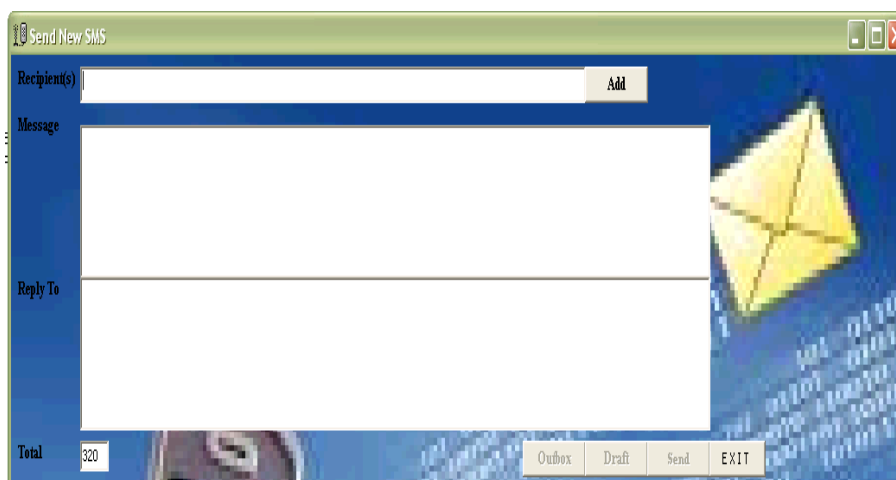


Figure 2 Send New SMS Layout

4. Conclusion

Based on the results of making and testing the system to send and receive SMS with Visual Basic 6.0, it can be concluded that the quality of a good and stable GSM network greatly influences system performance. For the stability of the performance of this system, the modem is used as an SMS server.

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