

Mobile Phone Assistance via Remote Desktop vis-à-vis



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MARCH 2010

Mobile Phone Assistance via Remote Desktop vis-à-vis

An Independent Study

Presented to

The Faculty of the Computer Studies Division

Ateneo de Davao University

In Partial Fulfillment

of the Requirements for the Degree

Bachelor of Science in Computer Science

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ABSTRACT

A lot of remote assistance applications are out on the market these days. And these applications provide promising features but limit us with a single major problem, its way of connection. Connections that these applications use are mostly through Bluetooth or worse cable wires on both computers' end and on the mobile phones' end.

The application that the team is proposing can control selected mobile phone feature with the use of a Desktop Computer and vice versa. And to address the major problem that we have sight earlier, we have decided to use network signals as its way of connection with the same capabilities that other applications have. With the possibilities of this proposed application it will most probably help users on some of their major problems with regards to security and accessibility to the features/capabilities of mobile phones.

Keywords:

Remote Assistance, Desktop Computers, Mobile Phones

CHAPTER 1

INTRODUCTION

1.1 Background of the study

We have dug up some research and from the works we have seen it seems that this kind of software application is currently out for the public. But as we have studied the software we found out that it has a major limitation that somehow defeats the purpose. The software is called MyMobiler® made by Microsoft®. This application is exclusively for Windows Mobile phones only which was the found major limitation. Another limitation would be the medium of connection. It uses ActiveSync to enable the connection between the desktop software to the Mobile software which makes our proposal apart from the existing application in the market. Our proposal has Signal as its medium of connection. Other features will be discussed as you read through the rest of the pages. Now, with this addressed limitation of currently running software we have decided to do a thesis regarding controlling a Mobile phone remotely through a personal computer.

1.2 Technology Application Context

Major Problem:

How do we create Mobile Phone Assistance via Remote Desktop (vis-à-vis)?

Sub-problems:

- How do SMS messaging work (how can it be intervened)?
- How does Caribide C++ Programs work on Cell Phones?
- What are examples of applications that were successfully integrated with GSM Modems?
- How to use SMS as a protocol?
- How can we connect Desktop Application to the Mobile Application?
- Which language is best for the program on the PC application/Cell phone Application?
- How do we convert SMS into an actual command?
- How do we make Parsers for SMS filtering?
- How do we communicate with a GSM Modem / Cell phone?
- How can we intervene incoming SMS?

- How can we work around with the capabilities of Cell Phones
- How to communicate with a GSM Modem, and alternatively to a cell phone as a GSM Modem
- How can we retrieve messages from GSM Modems

This study seeks to show that through SMS we could send commands and instructions to mobile phones and to be able to use this as a tool for activating or triggering a response, in a form of data, that can be useful for the users' interest; using mobile phone signals, Bluetooth and internet connections on PC as the medium for their interaction.

1.3 Objective of the Study

- Create an application that will enable access on the PC / Mobile phone technology in a remote distance
- To link PC and Mobile phone with SMS as a medium
- To find out the best language to be used for both applications

- To determine a path on how to connect 2 application using SMS
- To learn more about SMS
- To show other functions for SMS
- To acquire knowledge in mobile programming
 - o Mobile Application programming
 - o Know which language to use
 - o Send SMS through Desktop Computer
 - o Access mobile phone functionalities

The group aims to discover and learn new things; the said project proposal is suitable for such learning experience. Aside from the learning part, the aim to prove that SMS can be a code that would trigger embedded.

1.4 Significance of the study

The importance of this study is for mobile phone users to be able to find alternative solutions in accessing their mobile phones. This aims to help mobile phone users to easily access their phone units through personal computers Furthermore; this can be basis for other usage of SMS.

1.5 Scope and limitations of the study

Generally, our project is limited to Mobile Phones that run under Symbian OS, which is capable of running Carbide natured programs. As to our Desktop Application, it runs under Windows XP Operating system.

APPLICATION SCOPE:

Desktop to Mobile Phone

- can turn off mobile phone
- can activate call barring
- can send text message to your phone

Mobile Phone to Desktop

- receive and view text messages in desktop pc
- System Shutdown
- Run desired programs
 - Programs that doesn't require user intervention

APPLICATION LIMITATION:

Desktop to Mobile Phone

- real-time monitoring
 - view...
 - camera
 - photos
 - videos
 - messages
 - memory capacity
- turn on mobile phone
- other mobile features
 - change other mobile phone settings (e.g. theme,)
 - call other number

Mobile Phone to Desktop

- System boot-up
- Using Applications asynchronously

1.6 Definition of terms

ActiveSync *a data synchronization program developed by Microsoft for use with its Microsoft Windows line of operating systems.*

Algorithm *step-by-step problem-solving procedure, especially an established, recursive computational procedure for solving a problem in a finite number of steps.*

AT Command Set - *A series of machine instructions used to activate features on an intelligent modem.*

GSM (Global System for Mobile Communications) - *A digital cellular phone technology based on TDMA*

Operating System *an interface between hardware and user. An OS is responsible for the management and coordination of activities and the sharing of the resources of the computer.*

Symbian OS *an operating system designed for mobile devices, with associated libraries, user interface frameworks and reference implementations of common tools, produced by Symbian Ltd.*

HyperTerminal *an application you can use in order to connect your computer to other remote systems.*