

UNIVERSITI TEKNOLOGI MARA

**COMPUTER REMOTE MONITORING VIA
MOBILE PHONES USING SOCKET
PROGRAMMING**

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ABSTRACT

Presently, many researches have been made on remote monitoring and its techniques. The studies show beyond technical algorithms, physical aspects plays a big rule in client server model. Sockets programming is one of the most basic and useful method of achieving any client server connectivity. The approach of the mobile cloud is clearly occurring with web host servers expands thus large number of data around the world stored in huge servers, consumers of mobile devices and small computing devices have high performance expectations usually, therefore mobile cloud computing theorizes that the cloud will soon become a disruptive force in the mobile world, eventually becoming the dominant way in which mobile applications operates. In this dissertation a mobile cloud will be under consideration when designing the prototype, it is proven that mobile processors are tiny processors and could only handle a limited resources, thus the ability of making the applications processes in server, leaving the mobile clients a small part of only accessing data and interact with it. Such methodology can be achieved by java programming language for mobile clients J2ME, and by using a second generation mobile phones. Moreover, this prototype could be used as the basis for developing more advanced remote monitoring in term of performance to access and interact with mobile cloud, which is the future of mobile technology.

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CHAPTER 1

INTRODUCTION

1.0 Introduction

Mobile phones have been part of our daily lives for over a decade now. There have been many research studies on the use of wireless services for remote monitoring and control over these years. In the early stage of mobile phone usage, however, the growth of mobile applications had been limited by the non-availability of efficient handsets and secure wireless networks. There have been a number of research projects related to the use of the cell phone as a remote monitor and controller. Most of these projects have focused on telemedicine, education, control of plant and home appliances, and spatial information services, all these services are implemented and developed with different approaches and algorithms.

Mobile cloud in other hand has been bandied about a lot these days, mainly in the context of the future of the web. But cloud computing potential doesn't begin and end with the mobile platforms, it is going to be heavily impacted by this technology as well. At least that's the analysis being put forth. Theories proved that the cloud will soon become a disruptive force in the mobile world, eventually becoming the dominant way in which mobile applications operate. Thus mobiles and applications developers these days, being aware is just significantly useful due to the mobile cloud facts and existence.

The main purpose of this dissertation is to examine and evaluate some of the existing remote monitoring methods in mobile devices as well as developing a prototype