MOBILE BLUETOOTH REMOTE CONTROL

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Laporan projek ini dikemukakan sebagai memenuhi sebahagian daripada syarat penganugerahan ijazah Sarjana Muda Sains (Komputer)

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ABSTRACT

Mobile Bluetooth Remote Control uses the Bluetooth profile to communicate and control the mouse pointer, keyboard stroke and several applications software remotely. The system is meant as a presentation aid device and overcome the problem faced by a presenter during presentation. Mobile Bluetooth Remote Control will use the mobile phone as a Human interface device (HID) with the ability to control certain functions of the computer remotely. The mobile phone keypad acts as a combined keyboard and mouse were configured using a Java language using J2ME Software Development Kit (SDK). This leads to the studies and implementation of Bluetooth technologies, Bluetooth formation and configuration, Java programming and mobile phone technologies.
ABSTRAK

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CHAPTER I

INTRODUCTION

1.1 Introduction

Bluetooth technology is being used extensively in hand-held devices and wireless computing because of its characteristics. Bluetooth characteristics include; small yet powerful connectivity media, economical, and consume a minimal amount of power. This project aims to use Bluetooth technology to control the computer or replacing the mouse usage in short. More specifically, this project deals with the off-loading of data command from a device situated on the mobile devices. Such system is able to be developed by focusing on routing in Bluetooth networks, as well as giving an alternate option on remote controlling technologies.

The aim of this paper is to present "Bluetooth Remote Control" Application which is based on client-server application. The client application runs on mobile phone and the server application runs on PC using J2ME and J2SE respectively. This application can be used to control PCs via mobile phone. For example it can control the Internet Explorer, Firefox, Media player, changing the Power Point slides, and control the mouse.
1.2 Problem Statement

Presenter whom giving a presentation using a computer will face a problem resuming to the next slides without presentation aid devices such as the remote pointer/controller gadget. Such devices have limited capabilities and expensive. Presenter without the aid devices need to go back and forth to the computer through out the presentation process thus making the session less effective.

1.3 Project Purpose

Develop a mobile Bluetooth remote control device to control a Microsoft PowerPoint presentation, several popular computer applications and the mouse cursor of the computer.

1.4 Project Objective

i. Study on current Bluetooth remote control system
ii. Study on Bluetooth technology in respect of Microsoft Bluetooth Stack.
iii. Develop a client-server system based on Java application using Java J2ME SDK tools.
iv. Gather the possible functionality of the system from end-user.
v. Test the compatibility of the system on selected mobile phones.
1.5 Project Scope

i. A client-server system based on Java application.

ii. A remote pointer with a maximum length of 100 meters (Bluetooth v1.2 class 1), 20 meters (Bluetooth v1.2 class 2) and 10 meters (Bluetooth v1.1 class 2).

iii. System that replace the normal mouse function and capable of controlling some common software.

iv. System is limited to the Bluetooth devices that are compatible with the Microsoft Bluetooth Stack.

v. System testing focus on the Nokia N70 mobile phone