

Universiti Teknologi MARA

Wireless Mobile Attendance System

Mohd Hariz bin Naim

**Thesis submitted in fulfillment of the requirements for
Bachelor of Sciences (Hons.) Netcentric Computing
Faculty of Computer and Mathematical Sciences**

January 2012

ACKNOWLEDGEMENTS

In the name of Allah most gracious most merciful, Praise to Him that with His permission, I am able to complete this project.

A special thanks to my supervisor and instructor, Madam Zolidah Kasiran and also Dr.Kamarulariffin Abd Jalil who keeps guiding me throughout the whole project. This project could not be completed without their guidelines and help. Any person that involve in this project direct or indirectly, thank you very much.

TABLE OF CONTENTS

CONTENTS	PAGE
APPROVAL	ii
DECLARATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OC CONTENTS	v
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	xi
ABSTRACT	xii
CHAPTER 1: RESEARCH OVERVIEW	2
1.1 Research Background	3
1.2 Problem Statement	4
1.3 Objectives	5
1.4 Scope	5
1.5 Significant	6
Chapter 2 Literature Review	7
Introduction	7
2.1 Popular Computerized System	7
2.1.1 Stand-Alone system	8
2.1.2 Web-based system	9
2.1.2.1 Mobile Application with Web-based System	11
2.2 Wireless Technologies Evolution	12
2.2.1 Infrared Technology	12
2.2.2 IEEE 802.11 Wireless Technologies	13
2.2.2.1 IEEE 802.11a	14

ABSTRACT

Wireless Mobile Attendance system is a system that acts as alternative to current attendance system that staffs of FSKM use. Its main functionality is to provide wireless signing for work in or work out rather than staffs have to walk to the signing machine. The system is very helpful especially for staffs with less capability and also for pregnant staffs. For the mean time being, the system will be used by staffs at FSKM before being implemented on the whole campus.

Chapter 1

Introduction

In Chapter 1, the overall view of research will be discussed where it will focus on public problem faced by the staff of UiTM. Also the problem statement, the objectives and the scopes of project will be explained in the next section. The research will also bring significant to the public especially to the Faculty of Computer and Mathematical Sciences (FSKM).

1.1. Research Background

Every worker in an organization will have to sign for work and this is known as attendance. This is crucial as it will determine the total work hours and also help to calculate the payment or salary of the worker especially workers that are paid per hour.

In UiTM, every staffs have to sign for their attendance either for work in or work out. To punch for work in, they either have to use their thumb or use their work card. For staffs like lecturers, they only have to fulfill 38 hours per week whereas staff like administration will have to work in before 8 a.m and work out at 5 p.m.

The attendance system that is currently used will have the signing machine that is situated in certain place and staff will place either their card or thumb at the machine. Every worker has to this daily regardless their title as professor or PhD holders. This is because attendance record is very important to an organization like UiTM as it is one of measurement of quality. In gaining recognition and certification such as ISO 9001, all the documentation of administration must be properly documented. This includes the attendance record of each staff.

With the use of attendance management system, the documentation and record can be properly managed. There would be less hectic in producing complete report for inspection either by external or internal organization which usually inspects UiTM at least once a year. A good management system not only helps in better