## UNIVERSITI TEKNOLOGI MARA

# IMPLEMENTATION OF RFID FOR SECURITY SYSTEM (i-RSS) IN UITM CHANCELLERY OFFICE

### NOR AZIZAH BINTI HAMZAH

BACHELOR OF SCIENCE (Hons.)
DATA COMMUNICATION AND NETWORKING

**JULY 2015** 

#### **ACKNOWLEDGEMENT**

Alhamdulillah, praise and thank to Allah because of His Almighty and His utmost blessings, I was able to finish this project within the time duration given. There were many challenges I have been through upon completing the project but the blessing from Him given me strength to successfully complete this project.

Firstly, my special thanks go to my supervisor, Encik Adzhar bin Abd. Kadir, for his guidance, support, concerns, advice, idea and encouragement during the progress of the project to be accomplished. A special thanks also to my project coordinator, Puan Siti Arpah binti Ahmad for their comment, suggestions and criticisms throughout the completion of the project.

On top of that, I would like to give my special appreciation to my family, especially my beloved husband Encik Zulazmi bin Abd Ghani for their encouragement, support and motivation during the completion of this project. Also thanks a lot to my mother Puan were are a lot of support and motivation. Last but not least, I would like to give a big thanks and gratitude to all dearest friends and who were involved and have contributed to the completion of this project. I offer my regards and blessing to all of those who supported me in every aspect to complete this project.

#### **ABSTRACT**

i-RSS is a project that focuses on the scope that concentrates on the registration system of UiTM Chancellery Office. UiTM Chancellery Office is the hub of the university's administration. More than 200 visitors visit every month. In terms of functionality, this office provides administrative services to the Vice-Chancellor in carrying out their daily tasks. This project aim is to make registration process for UiTM Chancellery Office visitor runs smoothly by using RFID technology implemented with i-RSS. Currently, a very low technology has been used in order to take registration information. The main objective of this project is to develop system for registration of chancellery's visitors for security purpose using RFID technology. There used five phase methodology activities in this project which are planning, design system, development system, testing and documentation. Each phases has it owns deliverables that becomes this project findings in order to achieve the objectives of this project. Form the analysis of user that participated in UAT, the result shows that the percentage of admin is 58% and visitor is 42% familiar with that system.

## TABLE OF CONTENTS

CONTEN	TS	PAGE			
SUPERVISOR'S APPROVAL		ii			
DECLARATION		iii			
ACKNOWLEDGEMENT ABSTRACT TABLE OF CONTENTS LIST OF FIGURES LIST OF TABLES LIST OF ABBREVIATIONS		iv			
		v			
		vi			
		ix xi xii			
			CHAPTER	ONE: INTRODUCTION	
			1.1	Background of Study	1
1.2	Problem Statement	2			
1.3	Objectives	2			
1.4	Project Scope	3			
1.5	Project Significance	4			
1.6	Summary	4			
CHAPTER	TWO: LITERATURE REVIEW				
2.1	Discussion on Variables/Theory/Concept	5			
	2.1.1 RFID usage in registration system is common use	5			
	2.1.2 RFID usage in security system	7			
2.2	Complementary technology with RFID	8			
	2.2.1 Easy MyKad Reader	8			
	2.2.2 USBWebserver	8			

#### **CHAPTER 1**

#### INTRODUCTION

This chapter will discuss about the project background, problem statement, project objective, project scope, significant of study and outline of the thesis of the project. In the project background, brief overview about the whole project developed will be discussed. The problem statement describes why this project should be developed. Then, the project objective will be extracted from the problem statement. The scope of study is to explain about the target user of the system. The needs and the content of this project are also covered in this topic. Finally, the subtopic of this chapter will briefly describe on the significance of this project.

## 1.1 Background of Study

The study in the UiTM system at Chancellery office shows the ineffective of security managerial at helpdesk counter where by visitor's must register manually on logbook (personal communication, Dis 05, 2014). As we know, chancellery office is the hub of the university's administration. More than 200 visitors visit every month.

In terms of functionality, this office provides administrative services to the Vice-Chancellor in carrying out their daily tasks.

This project focuses on my scope that concentrates on the visitor identification system of UiTM Chancellery office. This system will cover the entire of this office using the Radio-Frequency Identification (RFID) technology and construct the database that will be integrated with this system (i-RSS).