# Universiti Teknologi MARA

## **Mobile Based Attendance System**

Nur Husnina Binti Ishak

Thesis submitted in fulfilment of the requirements for Bachelor of Computer Science (Hons.) Netcentric Computing
Faculty of Computer and Mathematical Science

January 2019

#### **ACKNOWLEDGEMENT**

Alhamdulillah, praise and thanks to Allah because of His Almighty and His utmost blessings, I was able to finish this research within the time duration given. Firstly, my special thanks go to my supervisor, Dr. Hj. Mohd Izani Bin Mohamed Rawi who always guide me in completing the report. Without her help and knowledge to complete this project is impossible. Thanks you to my lecturer Assoc. Dr. Nor Shahniza binti Kamal Bashah for helping me and my friends.

Special appreciation also goes to my beloved parent Ishak Bin Ibrahim and

. Without their support it could be difficult to finish it. There is no amount of thanks that would be enough to express their sacrifice, help and support.

Last but not least, I would like to give my gratitude to all my dearest friend especially my classmate CS2516A, who help me a lot with motivation, support and have been sharing some ideas and opinion with me in completing this project.

#### **ABSTRACT**

Nowadays all the system have been automation that easier for user to use rather than manually. Smart phone one of the most commonly use and more favored companions to users than desktop or notebooks. In the university, lecturer have to take students' attendance and most of it still using manual system, paper based. The problem using paper based for the attendance is it might get lost or damage for whatever reasons. Sometimes the paper might get torn or there any unwanted scribble on the paper that might damage. The objective of this project is to design an automated online attendance system. It easier for students and lecturer to take attendance if using automated online attendance system by using their smart phone. This system will using mobile based because it convenience for user to used it. Expected outcome from this automation attendance system is lead to efficient reporting and activity.

### **TABLE OF CONTENTS**

CONTENT			PAGE	
SUPE	RVISC	OR APPROVAL	I	
STUDENT DECLARATION  ACKNOWLEDGEMENT  ABSTRACT			II	
			III	
			IV	
LIST	OF FI	GURES	X	
LIST	OF TA	ABLES	XII	
CHAI	PTER 1	1: INTRODUCTION	1	
1.1	Backg	ground of Study	1	
1.2	Proble	em Statement	2	
1.3	Objective		2	
1.4	Scope		3	
1.5	Significance		3	
1.6	Summary		4	
СНАІ	PTER 2	2: LITERATURE REVIEW	5	
2.1	Technology Consideration		5	
	2.1.1	Integrated Development Environment	5	
	2.1.2	Mobile Development Tool	11	
	2.1.3	Techniques	13	
2.2	Related Works		18	
	2.2.1	Attendance Management System using a Mobile Device and		
		a Web Application (Iio, 2016)	18	

#### **CHAPTER 1: INTRODUCTION**

This chapter will provide the background study of this project, the problem statement of the reason of developing this project, the project's objective, the scope and significance of this project.

### 1.1 Background of Study

Generally, each every class in university, university instructor or lecturer will taking student attendance. The activity take times especially when the class are big with a big number of students. Some faculty policies instruct the attendance activity to be carry out in each lecture. Particularly, out of the total credit hour that are given to every course, may be neglected to fulfil this activity that normally takes around ten minutes per lecturer. In other word, attendance activity is managed by each lecturer manually.

The attendance activity and tracking is managed by each lecturers. Lecturers are manually maintain student attendance for analyzing and reporting. Students who are absent from lectures might face some learning issues such as missing lessons, difficulty in obtaining additional instruction and information.

Insights demonstrates that 42% of cell phone clients have a normal age of 26 years of age. Therefore, with the across the board of cell phones among college understudies, this paper tends to the issue of such a loss in the address time and proposes a framework that offers to decrease it by just about 90%. (Almasalha & Hirzallah, 2014).

Smartphones are becoming mainstream compared to desktops or notebooks. It provide an easiest and smart way to track attendance in institutions. The purpose of the smartphone based attendance system is to computerize the traditional way of recording attendance. Along this line, the will spare time as well as execution that were require to be put by lecturer.