

Universiti Teknologi MARA

**Mobile Class Attendance Application
System (MobCAS)**

Muhammad Ridhwan Bin Muhamidon

**Thesis submitted in fulfilment of the requirements
for Bachelor of Computer Science (Hons)
Faculty of Computer and Mathematical Sciences**

January 2015

ACKNOWLEDGEMENT

Alhamdulillah, praises and thanks to Allah S.W.T because of His Almighty and His utmost blessing, given me the opportunity in doing this project. This project is very important because basically for students completing the undergraduate program that leads to the Bachelor of Computer Science (Hons).

Firstly, I would like to acknowledge with much appreciation and thanks to Sir Mohamed Imran Bin Mohamed Ariff, my lecturer for subject Project Formulation CSP600 also subject Project CSP650, besides that, my special thanks go to my former supervisor Madam Masurah Mohamad and current project supervisor Madam Suraya Masrom for valuable guidance, advice and good motivation from the begin until the ended.

Special appreciation also goes to my beloved parents for their supports, finances, understanding and all thing in the value of the education and encouragement. Last but not least, I would like to give my gratitude to my dearest friend; classmate, roommate and housemate and who always with me for giving me moral support, guidance and encouragement in order to finish this project.

Thank you.

ABSTRACT

Current class attendance system in UiTM is still using the manual form to collect attendance with is collect signature of the student. Many neglected occurs when using the manual collection attendance system, including missing of attendance paper when needed and trouble to lecturer to calculate the percentage of absenteeism. The main purpose of the project is to develop a mobile application for class attendance record called MobCAS and provide the percentage of student absenteeism. This project development in android application because android is widely used and easy to create. This project uses phpMyAdmin as database and communicate using a webserver. The purpose of using phpMyAdmin as a database for MobCAS used by many users at one time. The results measured of learnability, effectiveness and acceptance of the application. For learnability, 30 percent respondent strongly agrees, 60 percent agree and only 10 percent disagree about the learnability of the application. For effectiveness, 30 percent strongly agree, 50 percent only agree and 20 percent of respondents not agree about the effectiveness of the application. Over 60 percent of respondents accept and interested to use MobCAS and the remaining are not interested.

TABLE OF CONTENTS

CONTENTS	PAGE
SUPERVISOR'S APPROVAL	ii
STUDENT'S DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	ix
LIST OF TABLES	xi
 CHAPTER ONE: INTRODUCTION	
1.0 Background of Study	1
1.1 Problem Statement	2
1.2 Research Objective	2
1.3 Research Scope	3
1.4 Research Significance	3
1.5 Conclusion	3
 CHAPTER TWO: LITERATURE REVIEW	
2.0 Introduction	4
2.1 Mobile Application	4
2.1.1 Native App	5
2.1.2 Web-based App	5
2.1.3 Hybrid App	6
2.2 Handheld Operating System	7
2.2.1 IOS	7

2.2.2	Windows Phones	8
2.2.3	Blackberry OS	9
2.2.4	Android	10
2.3	Attendance System	13
2.3.1	Conventional System	13
2.3.2	Online System	15
2.3.3	Mobile App System	15
2.4	Mobile Client Database	16
2.4.1	SQLite	16
2.4.2	Oracle Database Lite	16
2.4.3	MySQL	17
2.5	Conclusion	17

CHAPTER THREE: RESEARCH METHODOLOGY

3.0	Introduction	18
3.1	Research Process	18
3.3.1	System Functional	21
3.2	Software Architecture	23
3.3	Hardware Architecture	23
3.4	Conclusion	23

CHAPTER FOUR: DESIGN, DEVELOPMENT AND IMPLEMENTATION

4.0	Introduction	24
4.1	Development Process	24
4.1.1	Database Development	25
4.1.2	MobCAS Development (Interface)	29
4.1.2.1	Fill Attendance	32
4.1.2.2	View Percentage	34
4.1.3	Connection between Database and MobCAS	35
4.2	Conclusion	38