

**Universiti Teknologi MARA**

**NotiSMe!: Crowdsourced Student Tasks Reminder  
with Gamification**

**Muhammad Haziq Bin Mohd Hizal  
2017501441**

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

**January 2020**

## **ACKNOWLEDGEMENT**

Alhamdulillah 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, Miss Fadzlin Binti Ahmadon who give time, commitment, attention and contribution in suggestions as well as encouragement to complete this project especially in the development process. Next is my CSP lecturer, Dr Jamaluddin Bin Jasmis for guiding from the beginning until the end of this project development. Special appreciation also goes to my beloved parents for the continuous encouragement and support including their attention, financial and prayer while completing this final year project. Finally, I would like to give my gratitude to my dearest classmates from M3CS2306D for the help and support to completing this project.

## **ABSTRACT**

Students, tasks and time is inextricably linked. Each student is required to complete their tasks or assignments within a given period of time. However, for a certain number of students, they do not notice that there is a task that has been assigned to them and they lack motivation to finish the task given by lecturers. Therefore, the aim of the developed application is to increase students' awareness of the task that has been assigned to them and increase the students' motivation in finishing the task given to them. Mobile Application Life Cycle (MADLC) model has been chosen as the methodology for this project because it is frequently used in developing a mobile application. Gamification which consists of several game elements such as challenges, rewards, points, and badges are implemented in the application. The platform chosen for the application is android mobile-based platform. This project is about a mobile application that reminds students about tasks using the techniques of crowdsourcing and gamification. This application is a reminder application that allows users to share assigned tasks with their groups and reward users in term of badges for adding the tasks and completing them. Functionality testing has been carried out for the developed application. The outcome of the test is successful as all the twenty-two test cases is passed. Further improvement can be added to the application, for instance, add features like chat and leader board to the application. In conclusion, the application has been successfully developed and all the objectives have been accomplished.

## TABLE OF CONTENTS

CONTENT	PAGE
SUPERVISOR APPROVAL	ii
STUDENT DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	xi
LIST OF TABLES	xvi
LIST OF ABBREVIATION	xviii

### CHAPTER ONE: INTRODUCTION

1.1	Background of Study	1
1.2	Problem Statements	4
1.3	Objective	5
1.4	Scope	5
1.5	Significance	6

### CHAPTER TWO: LITERATURE REVIEW

2.1	Introduction to Students' Task and Time Management	9
2.1.1	Students' Task Management	9
2.1.1.1	UiTM Scheme of Work	9
2.1.2	Students' Time Management	10
2.1.2.1	UiTM Academic Calendar and Important Date	11
2.2	Motivation	12

2.2.1.1	Intrinsic motivation	12
2.2.1.2	Extrinsic Motivation	13
2.2.2	Challenges In Motivation	13
2.2.3	Motivation Techniques	14
2.3	Crowdsourcing	15
2.3.1	Crowdsourcing Types	16
2.3.2	Crowdsourcing Elements	17
2.3.3	Crowdsourcing Implementations	19
2.4.1	Gamification	19
2.4.2	Gamification Elements	20
2.4.2.1	Game Mechanics	20
2.4.2.2	Game Dynamics	21
2.5	Task Reminder Methods	22
2.5.1	Journal Method	23
2.5.2	Kanban Method	24
2.5.3	To-do-list Application Method	25
2.6	Platforms	26
2.6.1	Desktop Platform	26
2.6.2	Web-Based Platform	27
2.6.3	Mobile-Based Platform	29
2.6.3.1	Android	29
2.6.3.2	IOS	30
2.6.4	Comparison of Platforms	31
2.7	Related Works	32
2.7.1	Existing Applications Related to Task and Time Management	32
2.7.1.1	Comparison of Existing Applications Related to Task and Time Management	35