# Universiti Teknologi MARA

# Chemistry Form Four Mobile Application (MOLEKULAR)

Nurfittia Aimie Binti Md Amin

Thesis submitted in fulfillment of the requirements for Bachelor of Information Technology (Hons.) Business Computing Faculty of Computer and Mathematical Science

September 2019

### ACKNOWLEDGEMENT

Alhamdulillah, praises 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 goes to my supervisor,Nor Shahniza Kamal Bashah (DR.). Special appreciation also goes to my beloved parents, Mr.Md Amin bin Md Esa and Mrs.Suhailah Binti Ahmad. Last but not least, I would like to give my gratitude to my dearest friends that help me to develop this project. Next, I also want to thanks to all my friends that help me to develop this mobile application until finish.

### ABSTRACT

As we know that, there are many scientific name and method that student and teacher need to know if they teach and learn chemistry. This mobile application can ease the teacher and student to gain knowledge and teach about chemistry time by time without need to do a physical class. Nowadays, people tend to use smart phones especially teenagers. They are more like use smart phones to study, to do homework rather than student back in 90's.

This chemistry form four mobile application will help student to know in detailed content in chemistry study in short time due to the development of technology. This proposal was designed to make a research for making a prototype that will helps teacher and students to learn chemistry.

## **TABLE OF CONTENT**

# CONTENT

# PAGES

SUPERVISOR APPROVAL	L
STUDENT DECLARATIO	N
ACKNOWLEDGEMENT	
ABSTRACT	
TABLE OF CONTENT	
LIST OF FIGURES	
LIST OF TABLE	

### **CHAPTER ONE : INTRODUCTION**

1.0 Project Background	1
1.1 Problem Statement	2
1.2 Project Aim and Objective	3
1.2.1 Project Aim	3
1.2.2 Objective	3
1.3 Project Scope	4
1.4 Project Significant	5
1.5 Summary	6
CHAPTER TWO : LITERATURE REVIEW	
2.0 Introduction	7
2.1 Technology	7
2.1.0 Mobile Operating System	7
2.1.0.1 Android	8
2.1.0.2 Iphone Operating System (iOS)	8
2.1.2 Chemistry	9
2.2 Related works	10
2.2.0 Explora México: A mobile application to learn	10
Mexico's Geography (Romíroz et el. 2012)	
Geography (Ramírez et al., 2013). 2.2.1 Mobile apps for chemistry in the world of drug	11
discovery (Williams <i>et al</i> , 2011).	11
2.2.2 A Systematic Review of Educational	12
Mobile-Applications (Apps) for Surgery Residents:	
Simulation and Beyond (Dickinson & Bass, 2020).	
2.2.3 A Reliable Mobile Application for Safety on Roads	14
(Khelifi et al., 2013)	

2.2.4 Smartphones and mobile applications (apps) in clinical **16** 

#### **CHAPTER 1**

#### **INTRODUCTION**

This chapter lays out the context and reasoning for the analysis. It also gives details on the significant of chemistry study, the issues and problems that led to this research.

### **1.0 PROJECT BACKGROUND**

Osborne and Collins, (2000) stated that pupil interest and achievement in chemistry have diminished in the last decades. There are so many subjects nowadays for a student to study. For example science student needs to study chemistry, biologist and physic at one time. It is difficult for student to understand all the subject and pass the exam with flying colors. Today, the nature of chemistry has consequences for the teaching of chemistry. The fact that chemistry is a very complex subject is evidenced by the literature on problem solving and myths that has dominated the field over the last 15 years. New programs, especially those funded by NSF funds, which are based on making chemistry meaningful through problem-solving and collaborative learning, aim to improve chemistry education. The access control is needed to control access of specific resources (Ramar, 2013).

Consequently, the fostering of positive attitudes towards technology, science and science literacy, which has long been a part of science education, is increasingly a matter of concern. The definition of an attitude towards science, though, remains rather nebulous, sometimes poorly expressed and not fully understood.Attitude questions about science are not new. Nearly 30 years earlier, Ormerodand Duckworth (1975) launched a study of student attitudes to science in the United Kingdom.