

**Universiti Teknologi MARA**

**360° Image Viewing Knowledge Based  
on Herbs**

**Muhd Syahir Bin Shamsul Baharin**

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

**June 2018**

## **ACKNOWLEDGEMENT**

Alhamdulillah, praises and thanks 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, Dr Sharifahlillah Nordin for her guidance to make this project success as it is. Special appreciation also goes to my beloved parents Shamsul Baharin Sabudin and \_\_\_\_\_ for keep supporting me to finish up my project. Last but not least, I would like to give my gratitude to my dearest friend as they also give support and sharing their knowledge to make everybody success and pass this project.

## ABSTRACT

Malaysia is one of country which has a vast collection of biodiversity information of plant species. Since there are many plant species in this country, most Malaysian has turn to traditional medication as their alternative to cure disease and due to the highly cost and the side effect of the modern medicine. Furthermore, most people are believed that traditional medication by using herbs are free from unwanted side effects. There are lots of identical herb appearance out there, but the benefit may be different. Some people may have confused to differentiate and identify between the identical herb and most of the current herb knowledge-based system in market, the image being presented were in 2D images and the picture are seems crowded with the other herbs in one picture. The method used to make the 360° herbs images done is by shooting the herbs in studio with full 360° view of the herbs. This 360° image viewer have been compiled in HTML, CSS and JavaScript code in order to make the image slider keep looping in 360° view. This system also completes with others image of the particular herbs and also a tutorial video on how to use that herb as the traditional medication. The evaluation and validation has been made by having few targeted users to test the system whether the system is useful or not. The result has shown that, this system is way more better and useful in identifying and differentiate between identical herbs. In addition, user can get more information just by using this knowledge-based system project. In conclusion, this system has success and accomplished by producing an effective way to deliver the knowledge in this knowledge-based system project.

## TABLE OF CONTENTS

<b>CONTENT</b>		<b>PAGE</b>
<b>SUPERVISOR APPROVAL</b>		
<b>STUDENT DECLARATION</b>		ii
<b>ACKNOWLEDGEMENT</b>		iii
<b>ABSTRACT</b>		iv
<b>TABLE OF CONTENTS</b>		v – vii
<b>LIST OF FIGURES</b>		viii - ix
<b>LIST OF TABLES</b>		x
<b>LIST OF ABBREVIATIONS</b>		xi
<b>CHAPTER ONE : INTRODUCTION</b>		
1.1	Background of Study	1
1.2	Problem Statement	2
1.3	Objectives	2
1.4	Scope	3
1.5	Significance	3
1.6	Conclusion	3 - 4
<b>CHAPTER TWO : LITERATURE REVIEW</b>		
2.1	Herbs	5 – 6
2.2	Herbs Used	
	2.2.1 Sirih	6
	2.2.2 Kaduk	7
	2.2.3 Kunyit	8
	2.2.4 Temu Pauh	9
	2.2.5 Hempedu Bumi	10
	2.2.6 Kesum	11

# CHAPTER 1

## INTRODUCTION

This chapter explains about the background study, problem statement, objective, scope, the significance and the summary for this chapter.

### 1.1 Background of Study

Malaysia is one of the twelve world's mega-diversity country, which has a vast collection of biodiversity information of plant species (Nordin S. 2010). She also state that plant species recognition is major, as it offer valuable information where it is a knowledge source for other fields, including medical, food technology, and industry. Therefore, many people nowadays are turn to herbal medicine as their alternative to cure disease in order that modern medicine has it high cost and the side effects. According to Hamid Nasri (2013), peoples are turn to herbal medicine every year, because they believe that plant medication are free from unwanted side effects.

Nowadays, 360 degree image viewing has been raising popular in order the increasingly sophisticated technology and even our smartphone support the 360 degree viewing. Google is one of the company that has been widely used the 360 degree image viewing in order to present their Google Street View. According to Vincent, J. (2016) Google desire to create 360-degree content more convenient for more people. Moreover, it will have the sense of immersion when viewing the images that have been produce by 360 degrees camera (Brown, L. 2017).