

**Universiti Teknologi Mara**

**EXPLORING INSIDE THE  
COMPUTER WITH 3D  
ENVIRONMENT**

**Muhammad Zikri Bin Mohamad**

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

**DECEMBER 2016**

## **ACKNOWLEDGEMENT**

Alhamdulillah, praises and thanks to Allah because of His Almighty and His utmost blessing, I was able to finish this research within the time duration given. Firstly, my special thanks goes to my supervisor, Suzana Binti Ahmad for their supervision, assistance, idea, and patience in supporting my project from proposal up to the project. Thanks to both for giving me the opportunity to work under their supervisor.

Special appreciation also goes to my beloved parents, lecturers and friends for their love, care, pray and support that gave me strength to finish this project. I always wanted to say thanks for my Project Formulation (CSP600) course's lecturer, Dr Marina Binti Ismail for guiding us in two semesters.

Last but not least, my sincere gratitude extends to all individuals who have contributed either in directly or indirectly to ensure the success of this project.

Thank you.

## **ABSTRACT**

In this modern world, technology is important and now it has already becoming as platform for people to acquire knowledge and information. There is several method of learning such as discussion, exploring and study group. By using virtual reality approach, user can learn by using exploring. Senses of the body part are needed to make an interaction with the computer, and it also immerses the user into the virtual world. Computer component is very sensitive to the human hand because computer component has reputation for being finicky to troubleshoot. Thus, virtual reality method by using desktop based has become the solution to overcome those problems. This project develop using ADDIE methodology consisting analysis, design, develop, implement and evaluate. The methodology is suitable for this project. This project was evaluated by 10 student of first semester Computer Science student using effectiveness testing. In this project, two methods are used to test project effectiveness. The method are using book and learning application. Both are used the same questionnaire paper. Response was analyzed and the result indeed proven learning using application in 3D Environment have more advantage to the user.

## **TABLE OF CONTENTS**

<b>CONTENT</b>	<b>PAGE</b>
<b>SUPERVISOR APPROVAL</b>	ii
<b>STUDENT DECLARATION</b>	iii
<b>ACKNOWLEDGEMENT</b>	iv
<b>ABSTRACT</b>	v
<b>TABLE OF CONTENTS</b>	vi
<b>LIST OF FIGURES</b>	x
<b>LIST OF TABLES</b>	xii

### **CHAPTER ONE: INTRODUCTION**

1.0	Introduction	1
1.1	Project Background	1
1.2	Problem Statement	2
1.3	Project Objective	3
1.4	Scope of Research	3
1.5	Significance of the study	3
1.6	Conclusion	4

### **CHAPTER TWO: LITERATURE REVIEW**

2.0	Introduction	5
2.1	Learning Style	6
2.2	Computer	7
	2.2.1 System Unit	7
2.3	Component of system Unit	7
	2.3.1 Motherboard	7
	2.3.2 Central Processing Unit (CPU)	8
	2.3.2 Primary memory	9

# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

In this chapter, it will explain the details about project background, the problem statement, objective, scopes and the significance of the research study. This chapter describe the reason of this project to be developed.

### 1.1 Project Background

Reading is an important and most significant activity in a society. It is important for people to acquire knowledge and information. The information may appear in many different ways such as using digital, printed or virtual reality materials.

An example of digital material is E-book that can be found in laptops, computer and handheld device. The usage widely accepted as a resource of information. With growing amount of digital information resource and the increasing amount of people reading behaviour is affected. Furthermore, the use of element multimedia such as text, graphics, video and audio for digital content has attracted many educators and student to use them at another level and this bring the idea of distance education (Ali, 2003; Kim, D.A, & D&Gilman, 2008).

Traditional printed material is very common to society and they are still widely been use, which conveys planned course information. Examples of print resources like textbooks, workbooks, reference books, newspaper, journals and magazines. The usage of printed material has been decreased. In Malaysia for example, a few printing companies were closed due to their reducing in sales. This does not mean that people are not reaching. It just they switch the reading material from printed to digital.