

Universiti Teknologi MARA

**Mobile Learning Application: Learn
Human Anatomy (5DeriaApp)**

Nora Adila Binti Adizianan

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

January 2022

DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



.....
NORA ADILA BINTI ADIZIANAN
2019591305

JANUARY 30, 2022

ABSTRACT

The Covid-19 outbreak has forced many countries to close their borders and impose travel restrictions to contain further spread of the virus. This means that educational institutions have also had to be closed and students have to attend classes from home. While it is okay for some people to attend classes from the comfort of their homes, there are others who struggle with this because even in traditional classes, students have difficulty engaging with the lessons. Developing a mobile learning application can help students focus and gain a better understanding than just learning through books. This type of mobile application can also be used in traditional classes to encourage students to participate so that they can fully engage in class. This project presents the development of the 5DeriaApp, a mobile learning application for learning human sensory anatomy for first grade elementary school students. The 5DeriaApp provides interactive learning content and activities for users to try. The methodology used in the development of this project was the ADDIE modelling technique, an iterative method that allows for interruptions to make changes and modifications and develop a new version. This technique is well suited for the development of the 5DeriaApp project because it is easy to get feedback from users and allows for early evaluation. The application was equipped with multimedia elements such as texts, images, audios, videos, etc. The project was tested with functional tests and user acceptance tests. The user acceptance tests revealed that more than 70% of the respondents found the application easy to use, the content and design of the application interesting, and the application helpful in understanding the topic of human senses. The application can be further improved with more interactivity and the use of modern technologies such as augmented reality or mixed reality.

TABLE OF CONTENTS

CONTENTS	PAGE
SUPERVISOR'S APPROVAL	ii
DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
CHAPTER ONE: INTRODUCTION	
1.0 Introduction	1
1.1 Background of Study	2
1.3 Problem Statement	3
1.4 Project Question	4
1.5 Project Objectives	4
1.6 Project Scope	5
1.6.1 Target Audience	5
1.6.2 Features of the Application	5
1.7 Significance of Research	5
1.8 Summary	6
CHAPTER TWO: LITERATURE REVIEW	
2.0 Introduction	7
2.1 Education	8

2.2 Mobile Application	11
2.2.1 Mobile Application in e-Learning	11
2.2.2 Operating System for Mobile Apps	12
2.3 Requirement for Mobile App Development	12
2.4 Common Features Related App	13
2.4.1 Body Parts Games for Kids – Preschool Learning Game	13
2.4.2 Body Parts for Kids	16
2.4.3 Human Body Parts - Preschool Kids Learning	18
2.4.4 Comparison of Related App	19
2.5 Chosen Features	20
2.6 Summary	20

CHAPTER THREE: METHODOLOGY

3.1 Introduction	21
3.2 Operational Framework	23
3.2.1 Planning	23
3.2.2 Information Gathering	23
3.2.3 Data Collection and Analysis	24
3.2.4 Design	24
3.2.5 Implementation	25
3.3 Development Model	25
3.3.1 Analysis Phase	27
3.3.2 Design Phase	29
3.3.3 Development Phase	30
3.3.4 Implementation Phase	30
3.3.5 Evaluation Phase	31
3.4 System Architecture	31
3.5 Hardware and Software Requirement	32
3.6 Summary	33