

Universiti Teknologi MARA

**Mobile Application : Learn Dua
Together for Kindergarten Children**

Natasha Irina Bt Khairul Annuar

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

JAN 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.



.....

NATASHA IRINA BT KHAIRUL ANNUAR

2020988441

JAN 28, 2022

ABSTRACT

Nowadays, mobile devices such as smart phones are widely used for many purposes, ranging from entertainment, business to education. Touch screen technology provides an interactive experience that closely resembles a child's natural constructivist learning. Hence, devices such as smart phones and tablets attracts children easily. A study shows that children find using technology as a medium of education was more enjoyable than reading on conventional books and papers. Taking the advantage of this situation, this study aims to develop an interactive multimedia-based mobile application for kindergarten children to learn duas, and to evaluate their performance of learning it through the application's built-in quizzes and also to evaluate usability and acceptance of the user towards the application. The application is built using ADDIE model, due to its model that produces measurable results and feedback, enabling continual improvement in the development of the application. It was developed using Android Studio, Flutter and Animaker to create studio quality animations in the application. The application consists of daily duas module, Jawi module, quiz module and results module. The results show positive feedback from the respondents, where more than 60% of the respondents prefer to learn duas from the application instead of conventional textbooks. Most of them are pleased and enjoy learning while using the application. The combination of Islamic education and technology shown to be effective to the younger generation.

TABLE OF CONTENTS

CONTENTS	PAGE
SUPERVISOR'S APPROVAL	iii
DECLARATION	iv
ACKNOWLEDGEMENT	v
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	xi
LIST OF TABLES	xiv
CHAPTER ONE : INTRODUCTION	
1.1 Introduction	1
1.2 Background of Study	2
1.3 Problem Statement	2
1.4 Project Question	3
1.5 Project Objective	3
1.6 Project Scope	4
1.7 Significance of Study	4
1.8 Conclusion	4
CHAPTER TWO : LITERATURE REVIEW	
2.1 Introduction	6
2.2 Overview of Domain	
2.2.1 Education for Children in Early Age	7
2.2.2 Education in Islam	7
2.2.3 List of Dua according to Kindergarten Syllabus	8

2.3	Overview Research Area/Elements	
2.3.1	Mobile Application	9
2.3.2	Multimedia	10
2.4	Specific Description of Area	
2.4.1	Educational Applications (Mobile Learning)	11
2.4.2	Multimedia Animation in Education	12
2.5	Techniques in Area	
2.5.1	Game-based Learning	14
2.5.2	Phonics Reading Technique	15
2.5.2	Multisensory Technique	15
2.5.2	Chatbot	16
	Comparison of techniques (discussion & table of comparison)	17
2.6	Common Features Related to Project	
2.6.1	Muslim Kids Series : Dua	18
2.6.2	Kids Dua Now – Daily Islamic Duas for Kids	19
2.6.3	Daily Duas for Kids	20
2.6.4	Muslim Kids Dua Series – Pro	21
	Comparison Of Related Applications	22
	Chosen Techniques & Features with Justification	23
2.7	Summary	23

CHAPTER THREE : METHODOLOGY

3.1	Introduction	24
3.2	Research Methodology/Framework	
3.2.1	Research Design and Methodology	25
3.2.2	Operational Framework	
	Phase 1 : Problem Assessment & Research Study	26
	Phase 2 : Information Gathering	27
	Phase 3 : Design	28