

UNIVERSITY TECHNOLOGY MARA

TEACHING JAWI ALPHABET USING FLASHCARD IN  
TABLET ENVIRONMENT

**NUR AFIQAH BINTIANUAR**

Thesis submitted in fulfillment of the requirements for  
**Bachelor of Science (Hons) Multimedia Computing**  
**Faculty of Computer And Mathematical sciences**

**JULY 2012**

## ACKNOWLEDGEMENT

First of all, I would like to gratitude to God with His blessing and willingness, I can finish up this project on time. Alhamdulillah. Without His help, this project cannot be completed.

Secondly, I would like to gratitude to my both parents whom had raised me up and take a good care for me since I am newly born until now. There are so many things that they had contributed on me in order to give me the chance to continue study.

I would also thank to my supervisor, Dr Fakhrol Hazman Yusoff for guiding me in completing this project. There are some tips that he gave to me that no one can teach that. Besides that, I would also like to thanks to Mr Mohd Yusuf B Mohd Yusof that guides and give explanation during the lecture session in the classroom. Without these two persons, I don't think that I am able to finish this proposal.

Last but not least, a big thanks to my colleagues, especially  
for their supporting and helping me from the beginning until the end. Thanks for the group discussion that we always make at the online social network. Not forget to all people that involved in helping me directly or indirectly. Thank you.

## **ABSTRACT**

Jawi is one style of writing that have been widely use during the era of the Melayu in a few centuries ago. Even though Jawi has existed for a long time ago, but still many people cannot read or write Jawi very well as writing using Jawi script is becomes fading. Many students does not have interested in learning Jawi as they feel learning Jawi is bored and complicated. Therefore, this project is about designing a flashcard to teach Jawi alphabet for kindergarten student using flashcard in tablet environment which use Android based platform. By using the new learning environment, it might catch student attention as there are some multimedia elements are included in developing it. This application is divided in two parts which the first part will teach the student by showing one to one alphabet and related picture on it. For the second part, there are some quizzes that student have to choose the right answer according to the sound of alphabet that will be heard. The expected outcomes of the application are, kindergarten student can easily remember the new script (Jawi) that they have learn so that it will be easier for them to read and write fluently in the future.

# TABLE OF CONTENT

ACKNOWLEDGEMENT.....	1
ABSTRACT.....	2
TABLE OF CONTENT.....	3
TABLE OF FIGURES.....	6
CHAPTER 1.....	8
INTRODUCTION.....	8
1.1 Project Background.....	8
1.2 Problem Statement.....	9
1.3 Project Objective.....	9
1.4 Project Scope.....	10
1.5 Significance Of The Study.....	10
CHAPTER 2.....	11
LITERATURE REVIEW.....	11
2.1 Overview Of Jawi.....	11
2.2 Overview of Flashcard.....	14
2.3 Overview of Teaching Method and Learning Theory.....	18
2.4 Overview of Tablet PC.....	20
2.4.1 Android OS.....	22
2.5 Overview of Game Maker.....	25
CHAPTER 3.....	27
METHODOLOGY.....	27
3.1 Research framework.....	27

3.1.1	Analysis.....	29
3.1.2	Design.....	31
3.1.3	Development.....	34
3.1.4	Implementation.....	36
3.1.5	Evaluation.....	37
CHAPTER 4.....		39
DESIGN AND IMPLEMENTATION.....		39
4.1	Conceptional design.....	40
4.2	Designs and Development Flow Diagram.....	41
4.3	Interface design using Game Maker.....	42
4.4	Creating Behavior using Game Maker.....	49
4.4.1	Link behavior.....	50
4.4.2	Touch behavior.....	52
4.4.3	Random page behavior.....	54
4.4.4	Drag and drop behavior.....	56
CHAPTER 5.....		59
EXPERIMENTATION AND RESULT.....		59
5.1	Screenshot of available pages.....	59
5.2	Result of testing.....	65
5.2.1	Playability Question.....	66
5.2.2	Platform Question.....	67
5.2.3	Jawi Element Question.....	68
5.2.4	Touch Screen Question.....	69
5.2.5	Aesthetic Question.....	70