USABILITY EVALUATION OF E-TAJWEED USING HEURISTICS EVALUATION FOR COURSEWARE (HECW)

NURUL NADWA BINTI BADRI

Report submitted in partial fulfilment of the requirements for the degree of

Master of Science (MSc.) Information Technology Faculty of Computer and Mathematical Sciences

January 2016

STUDENT DECLARATION

I certify that this thesis 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.

In the event that my thesis be found to violate the condition mention above, I voluntarily waive the right of conferment of my degree and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

: Nurul Nadwa Binti Badri

Name of Student

Date

Student's ID No.	: 2012553075
Programme	: CS770 Master of Sciences in Information Technology
Faculty	: Faculty of Computer and Mathematical
	Sciences
Thesis Title	: Usability Evaluation of E-Tajweed Using
	Heuristics Evaluation for Courseware (HECW)
	٠.
Signature of Candidate	:

: 26th January 2016

ABSTRACT

Evaluation for e-learning application is important in order to make it usable and acceptable. Evaluation of website and system is usually using Heuristic Evaluation (HE) because it will become specific evaluation that can detect more error than other type of evaluation. This research describes the use of HE in e-learning evaluation. The comparison of the evaluation result between HE and other type of evaluation is shown to make differences between different evaluations. The analysis of the usability must be done correctly to create successful product. It will help developer identify the usability problem on the e-learning application. The biggest challenge in education industry is to create a product that is educational, usable, acceptable and pleasant to user. Usability has become a global concern and cause more usability labs are built around the world. The evaluation of e-learning must stress the educational aspect, as well as interaction factors such as the efficiency, effectiveness and user satisfaction. The usability method called Heuristics Evaluation for Courseware is used to evaluate the E-Tajweed courseware. The method is adapted from UsabAIPO project. The analysis is done by the USABHECW formula. The analysis show that the Interface, Educational Element, Content and Additional Element on the E-Tajweed courseware is need to be improving as the usability value is higher than 20%. Suggestion from the expert is highlighted as a guide to the future betterment.

ACKNOWLEDGEMENT

In the name of Allah S/W/T, The Most Gracious and The Most Merciful,

First and foremost, praise to Allah the Almighty for allowing me to complete this research and for everything that He has given me, blessings and guidance for me in facing all the challenges throughout this research.

Sincere appreciation is given to my supervisor, Puan Nor Aziah Daud for her patience supervision, advice and guidance from the early stage of this research. Above all and the most needed, she provided me constant encouragement and support in various ways. To my coordinator, Dr Jasber Kaur a/p Gian Singh, many thanks for your great reminder and keeping me focused on track in this research. My greatest gratitude also goes to my evaluator support and suggestion throughout completing this research, and also gratitude to my beloved husband, Encik Mohd Shahrizan Razlan also my parents, Encik Badri Ismail and Puan Misnah Kamari for their trust and prayers.

I also wish to express my special thanks to all my lecturers, classmates and friends who had supported me in any admiration to the flourishing realization of thesis, as well as expressing my deepest apology to whom that I could not mention personally one by one.

TABLE OF CONTENTS

CONTENT		<u>PAGE</u> i ii iii
STUDENT DECLARATION		
ABSTRACT ACKNOWLEDGEMENT		
LIST OF FIGURES LIST OF TABLES		vii viii
1.1	Research Background	1
1.2	Problem Statement	2
1.3	Research Question	2
1.4	Research Objectives	3:
1.5	Research Significance	3:
1.6	Scope and Limitation	3
1.7	Organization of Thesis	3
CHAPTER	2 : LITERATURE REVIEW	
2.1	E-Learning	5
	2.1.1 Convenience Store New Employee Training	5
2.2	Courseware	7
2.3	Courseware Overview	7
2.4	Usability Evaluation	9