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This report is submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Interactive Media)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA 2007

DECLARATION

I hereby declare that this project report entitled

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is written by me and is my own effort and that no part has been plagiarized without citations.

SUPERVISOR : Date: 12/11/2007.

BT. ABDULLAH)

DEDICATION

To my beloved parents and friends, thanks for giving me supports and hopes to finish this project with successful. Thank you.

ACKNOWLEDGEMENTS

Thanks giving to Allah S.W.T because finally I had finished my final project successfully for Projek Sarjana Muda (PSM). I would like to express my gratitude to Madam Rosmiza Wahida Abdullah, my faculty supervisors for facilitating me in the process of undergoing my Projek Sarjana Muda I (PSM I) and Projek Sarjana Muda II (PSM II) and also like to thank all my lecturers for giving motivation to gain self belief and confidence in the process of developing the project.

I would also like to thank my beloved parents who have been giving me endless support and encouragement throughout my project.

ABSTRACT

Jawi's learning would be vital and must beat continuously so that the child's developmental level of Jawi can be improvement. So, for Projek Sarjana Muda (PSM), the project that will be developed is Mari Belajar Jawi courseware that specify for learning Jawi. The objective of this courseware is to determine the problems of current system and the students. This courseware will be use by the kindergarten students aged between 4 years until 6 years old and will be develops using a Windows XP platforms and software Macromedia Flash 8 because this software is easy to use and can make the animations. Mari Belajar Jawi will be develops in five modules that include a 3R concept. The modules are Mari Mengenal Abjad Jawi, Menulis Abjad Jawi, Mari Membaca, Menguji Minda and Bantuan. For developing the courseware, the ADDIE was choosing. ADDIE model include a five phases that are Analysis, Design, Development, Implementation and Evaluation. In analysis phase data were collected by using informal interviews and observations. Besides that, the hardware and software will be use was determined in this phase. The findings of this study revealed those learning and teaching of Jawi is less. Storyboard will be produced during design phase. After project being implemented, the testing will doing to get the feed back from the user.

ABSTRAK

Pembelajaran Jawi adalah penting dan perlu diajar secara berterusan supaya tahap penguasaan Jawi kanak – kanak dapat dipertingkatkan. Oleh itu, untuk Projek Sarjana Muda (PSM) projek yang akan dibangunkan ialah perisian pembelajaran Mari Belajar Jawi yang khusus kepada pembelajaran Jawi. Perisian pembelajaran ini bertujuan untuk mengenalpasti masalah - masalah dalam sistem semasa dan masalah - masalah yang dihadapi oleh pelajar - pelajar tadika. Perisian pembelajaran ini akan digunakan oleh pelajar - pelajar tadika yang berusia antara 4 hingga 6 tahun. Perisian pembelajaran ini akan dibangunkan mengunakan Windows XP sebagai platform dan perisian Macromedia Flash 8 kerana perisian mudah digunakan dan juga boleh membuat animasi. Perisian pembelajaran Mari Belajar Jawi mengandungi lima modul utama yang mempunyai ciri - ciri konsep 3M. Antara modul - modul tersebut ialah Mari Mengenal Abjad Jawi, Menulis Abjad Jawi, Mari Membaca, Menguji Minda dan Bantuan. Untuk pembangunan perisian pembelajaran ini, metadologi yang telah dipilih ialah model ADDIE iaitu Analysis, Design, Development, Implementation dan Evaluation. Dalam fasa analysis, satu sesi temubual dan pemerhatian telah dijalankan sebagai instrumen kajian. Selain daripada itu, perkakasan dan perisian yang akan digunakan juga ditentukan. Dapatan kajian menunjukkan pembelajaran dan pengajaran Jawi adalah kurang. Melalui fasa design, papan cerita akan dihasilkan. Setelah membangunkan projek, proses pengujian terhadap produk dilaksanakan untuk mendapat maklum balas dari pengguna.

TABLE OF CONTENTS

CHAPIEK	SUB	JEC 1	ragi
		A	
	DEC	LARATION	ii
	DED	DICATION	iii
	ACK	KNOWLEDGEMENTS	iv
	ABSTRACT		v
	ABS	TRAK	vi
	TAB	LE OF CONTENTS	vii
	LIST	T OF TABLES	xi
	LIST	r of figures	xii
	LIST	T OF ATTACHMENTS	xiv
CHAPTER I	INT	RODUCTION	
	1.1	Project Background	1
	1.2	Problem Statement(s)	2
	1.3	Objectives	3
	1.4	Scope	4
	1.5	Project Significance	5
	1.6	Expected Output	6
	1.7	Conclusion	7
CHAPTER II	LITI	ERATURE REVIEW AND PROJECT	
	MET	THODOLOGY	
	2.1	Introduction	8
	2.2	Fact and Findings	9
		1 75 5	

C Universiti Teknikal Malaysia Melaka

9

		2.2.2	Existing System	10
			2.2.2.1 Case Study	10
		2.2.3	Technique	20
			2.2.3.1 Open – Ended Questions	20
			2.2.3.2 Research by Online	21
			2.2.3.3 Research by Media	21
			2.2.3.4 Animation	21
			2.2.3.5 Individual Learning	. 22
	2.3	Projec	et Methodology	22
		2.3.1	Analysis	23
		2.3.2	Design	23
		2.3.3	Development	24
		2.3.4	Implementation	24
		2.3.5	Evaluation	24
			2.3.5.1 Formative	25
		•	2.3.5.2 Summative	25
	2.4	Projec	et Requirements	25
		2.4.1	Software Requirement	25
		2.4.2	Hardware Requirement	27
	2.5	Projec	et Schedule and Milestones	27
	2.6	Concl	usion	34
CHAPTER III	ANA	LYSIS		
	3.1	Introduction		35
	3.2	Proble	em Analysis	36
		3.2.1	Current System	36
		3.2.2	Observation	38
		3.2.3	Interview	39
		3.2.4	Identified Problem(s)	40
	3.3	Requi	rement Analysis	41
		3.3.1	System Centered Design	42
		3.3.2	Others Requirement	45
			3.3.2.1 Software Requirements	45

2.2.1 Domain

		3.3.2.2 Hardware Requirements	47	
	3.4	Conclusion	47	
CHAPTER IV	DES	IGN		
	4.1	Introduction	49	
	4.2	System Architecture	50	
		4.2.1 Mari Belajar Jawi courseware	51	
	4.3	Preliminary Design	53	
		4.3.1 Storyboard Design	54	
	4.4	User Interface Design	61	
		4.4.1 Navigation Design	65	
		4.4.2 Output Design	65	
	4.5	Conclusion	65	
CHAPTER V	IMP	IMPLEMENTATION		
	5.1	Introduction	67	
	5.2	Production and Implementation	67	
		5.2.1 Production of Texts	68	
		5.2.2 Production of Graphics	69	
		5.2.3 Production of Audio	71	
		5.2.4 Production of Animation	72	
		5.2.5 Process of Integration	73	
	5.3	Product Configuration Management	73	
		5.3.1 Configuration Environment Setup	74	
		5.3.2 Version Control Procedure	74	
	5.4	Implementation Status	76	
	5.5	Conclusion	78	
CHAPTER VI	TES	TING		
	6.1	Introduction		
	6.2	Test Plan	80	
		6.2.1 Test User	80	
		6.2.2 Test Environment	81	
		6.2.3 Test Schedule	81	

		6.2.4 Test Strategy	82	
		6.2.5 Test Implementation	85	
		6.2.5.1 Test Description	85	
	6.3	Test Result and Analysis	85	
		6.3.1 Analysis Testing	86	
	6.4	Conclusion	87	
CHAPTER VII	PROJECT CONCLUSION			
	7.1	Observation on Weaknesses and Strengths	88	
	7.2	Propositions for Improvement	89	
	7.3	Contribution	89	
	7.4	Conclusion	90	
REFERENCE				
APPENDIX	APPENDIX A			
	APP	ENDIX B		

LIST OF TABLES

TAB	LE TITLE	PAGE
2.1	Functional Elements and Descriptions	16
2.2	Activities and Project Descriptions for PSM	28
4.1	User Interface Design	62
5.1	Production of Texts	68
5.2	Production of Graphics	70
5.3	Software Configuration Setup	74
5.4	Version of Module	75
5.5	Implementation Status	76
6.1	Hardware and Description	81
6.2	Test Schedule 1	81
6.3	Test Schedule 2	82
6.4	Test Schedule 3	82
6.5	Test Result and Analysis for 40 People	86

LIST OF FIGURES

DIAC	GRAM TITLE	PAGE
2.1	Underlying Models and Methodologies	13
2.2	Commonly used fonts (left) and nontraditional fonts	14
	(right)	
2.3	Colour scheme text and background colour	14
2.4	Sample UI Design and suitable colour for school	18
	children	
2.5	ADDIE model	23
3.1	Cover of Mengenal Abjad Jawi book	36
3.2	Interface book of Mengenal Abjad Jawi	37
3.3	Interface book of Mengenal Abjad Jawi	37
3.4	Conceptual models for this courseware	42
3.5	Navigation of Mari Belajar Jawi courseware	44
4.1	System architecture for Mari Belajar Jawi	50
4.2	Flowchart of Mari Belajar Jawi courseware	53
4.3	Interface Montage	54
4.4	Interface Main Menu	55
4.5	Interface Mari Mengenal Abjad Jawi	55
4.6	Interface Huruf – huruf Jawi	56
4.7	Interface Huruf Vokal Jawi	56
4.8	Interface Menulis Abjad Jawi	57
4.9	Interface Mari Membaca	57
4.10	Interface Sang Monyet yang Haloba	58
4.11	Interface Kisah Raja Bersiung	58
4.12	Interface Menguji Minda	59
4.13	Interface Latihan 1	59

4.14	Interface Latihan 2	60
4.15	Interface Latihan 3	60
4.16	Interface Bantuan	61
5.1	The Sample Rate and Bit - Depth of Audio	71
5.2	Audio Editing Using Sound Forge 8.0	72
5.3	Show the Frame by Frame Animation Technique	72
6.1	Graph of Analysis Testing for Average Result	86

LIST OF ATTACHMENTS

ATTACHMENT

TITLE

Appendix A

Gantt Chart

Appendix B

Sample Questionnaire

CHAPTER I

INTRODUCTION

1.1 Project Background

Nowadays, Information Technology (IT) has changes many sectors in all around the world. Edutainment sector also improve their level with the IT platform such as the delivery medium, how to get the information, facilities and others.

For Projek Sarjana Muda (PSM), the project that will be developed is Mari Belajar Jawi courseware that specify for learning Jawi from recognizing the Jawi alphabets aspect, how to pronounce the Jawi alphabets, how to read and write in Jawi and quizzes for student acceptance test whether it is effective or otherwise. This courseware will be use by the kindergarten students aged between 4 years until 6 years old, teacher who teach this subject and also parents for learning process at home. This is because, the students within that ages, they need non – stop learning process and interesting based on the Human Computer Interaction (HCI) concept from the using a suitable colour aspect, font and audio that clearly so that they can remember more and understand better.

Mari Belajar Jawi courseware for kindergarten students is consisting of sub – topics or modules that include a 3R concept are Reading, Writing and Arithmetic. According to Sowey (2001) parts of effective teaching is making it memorable. So, to make the effective teaching the concept of modules is 3R. Besides that, this courseware is also consists of combination of multimedia elements such as audio, text, graphic and animation to make the student interested to learn about the Jawi.

From there, the students can attract this program and search the topic they want without go to the slide by slide. Before this, students just learn and do exercises from the book and teachers. This learning method is difficult for students in memorizing because the book just displayed the static images. So, some researchers on gathering the information need to be done for this project.

This project developed using Macromedia Flash Professional 8, Sound forge 8.0, Adobe Photoshop CS2, and Swish MX. This project is containing the interactive learning and more interesting compare to the book. The courseware include animation, graphic, colour, text and audio to present the information.

1.2 Problem Statement(s)

Currently, teachers like to use books and other learning tools such as using a flash cards and writing at blackboard or whiteboard as a material of teaching to explain the entire of learning Jawi including recognize the Jawi alphabets, pronunciation the Jawi alphabets, writing in Jawi and some quizzes this is not an effective ways in learning process it is because the book uses in studying is find to be bored with information presented is not interesting and the images are static, it was difficult for students to remember and understand the Jawi writing because it is different with another writing such as Malay and English.

In learning Jawi, the students must memorize the Jawi alphabets before go to the next level such as to read or write. Many technique of memorizing can be used but it is take more time to remember. Based on the observation, if using the old technique which based on book, it has some weakness and problems that is very critical where lack of student can read or write in Jawi.

In this project, Mari Belajar Jawi will be having five modules such as recognize the Jawi alphabets, the spelling, writing in Jawi, quizzes and help for user guideline. From the observation, Jawi is difficult to understand and remember the alphabets in terms of writing. On the other hand, it is look different with Hijayah

alphabets. It is because Hijayah alphabets are basic alphabets in Al – Quran but in Jawi have additional alphabets. So, by using the books, it is not guaranteed that the students understand with clearly and memorized the entire Jawi alphabets. Hence, the Mari Belajar Jawi will help the students to understand and easy to remember by using animation and colourful interfaces. There is also having quizzes segment to examine the student memorizing.

Besides that, lack of teaching materials. Teachers also do not have the suitable teaching materials. When the teacher uses the books or other materials for teaching, it become bored to learn more because there is no sound and used the static image. The teacher also cannot give a good explanation regarding the topic to the students, it is ineffective methods. Therefore, this courseware can help the teachers to explain this topic better and can improve the students in learning Jawi whether in writing or reading with using the attractive graphics, animation and audio.

1.3 Objectives

The main objective in this project is to provide a Mari Belajar Jawi courseware for kindergarten students between 4 years until 6 years old. This project only focuses on basic learning in Jawi such as recognize the alphabets, how to pronounce, how to read and writing. This courseware also consists of exercises or quizzes that relate to the topic for student acceptance test. In addition, other objectives for this project are:

To teach the children to recognize Jawi alphabets.

Learning Jawi for kindergarten students is less because of the now syllabus is focus on learning Iqra' compare with the learning of other subjects such as Mathematics, Bahasa Melayu, and English in terms of learning time and material that using in teaching process. With using multimedia elements such as text, graphics, audio and animation in this courseware, is make the students more recognize, understand and remember the Jawi alphabets.

 To teach the children how to pronounce the Jawi alphabets and certain phrase.

In this courseware, the students can learn how to pronoun the Jawi alphabets. Although at school the students was learned the Jawi alphabets but their using flash cards that is not interesting and repetition of learning is limited. When using a Mari Belajar Jawi courseware, the students can learn how to pronounce the alphabets in many times until their catch up it. Besides that, the students also can learn how to pronounce the certain phrases such as ayam, rumah, ibu, ayah and many more that suitable with their aged level.

To assess the children remember what they learn through the quizzes.

Besides they are learn the recognize alphabets and pronunciation, the student also will be testing for acceptance test through the quizzes to ensure the student remember and understand what they learned before. This courseware includes the simple quizzes that covered the previous topic. To make the interesting interface, the sound will be added so that the student enjoy and have fun during the learning process.

1.4 Scope

Specific Users

In the kindergarten education, learning of Jawi in terms of writing and reading is less and not all the kindergarten were learn the Jawi because learning of other subjects such as Mathematics and Bahasa Melayu in not in Jawi writing unless in Islamic Education. As a result, lack of student that know the Jawi either on writing or reading. So, the Mari Belajar Jawi courseware will be develops in five modules. The modules will be develops for kindergarten student between 4 years until 6 years old. Hence, this will

give a good impact to the students especially in improvement the reading of Jawi as where the emphasis by government.

Functionally of System

This courseware is especially for beginners' learners such as kindergarten students because it is include a colourful interfaces, the suitable font type and size also the colour, graphics and interesting sound so that the students will be remembers. This courseware will be develops in five modules and among the modules in this project are recognize Jawi alphabets, pronunciation the alphabets, Jawi writing, quizzes and help. In addition, developing the courseware for kindergarten student, criteria's that need give emphasize is colour and font type and size to attract the student. Currently, range of student aged between 4 years until 6 years old, they are will more remember through the pictures because the children will fast learn via visual and more understand also remember. Furthermore, making the interesting courseware and user friendly is important in developing the courseware. From there, the students will be have fun and enjoy while their in learning process and not getting bored. So, this courseware will be develops using a Windows platforms and software Macromedia Flash Professional 8 because this software can make the animations. The student within the 4 years until 6 years old, they are more interest with animation and from there, their will be fast to remember. This courseware is only can play at Multimedia Personal Computer (MPC) or notebook

1.5 Project Significance

Kindergarten students can use the courseware as effective and attractive learning tools compares to the text book. It is simple and easy to understand and remember. This courseware focuses on the learning Jawi which covers the basic learning. It is include a few multimedia elements such as interesting text, graphics, audio and animation.

In this project, all the structure in learning Jawi process is presented in the colourful images and interesting audio. Besides that, it is also presented in animation series in recognize the Jawi alphabets such as shown the alphabet one by one. From there, the students will understand more, recognize and remember the Jawi alphabets.

Besides that, this courseware provides the exercises or quizzes segment. The questions provided are based on what they learned before through this Mari Belajar Jawi courseware.

This courseware will be an effective learning device for students and teachers. The students will not be bored if the learning process conveys interesting, easy to understand. This Mari Belajar Jawi courseware including an animation and colour representation that is interesting compare with the current learning system which uses books.

1.6 Expected Output

The expected output for Mari Belajar Jawi courseware is presented in compact disk (CD) and has combination multimedia elements such as text, graphics, animation and audio. This courseware is consists five main modules such as *Mari Mengenal Abjad Jawi, Menulis Abjad Jawi, Mari Membaca, Menguji Minda* and *Bantuan*. This project is a user friendly courseware because it is have a *Bantuan* button where the student or teachers can read the guidelines before used the project. It wills easy for the person that doesn't have IT knowledge. The information is displayed in the animation, graphic colour, interesting text and audio. The most important feature for this project is the images will be design and display in 2D animation.

1.7 Conclusion

The project is developed for kindergarten students because the content of the courseware is specific for the beginners Jawi learners such as recognize the Jawi alphabets, pronunciation and writing. The objective of this courseware is to absorb the using Jawi writing and improve the Jawi learning from the child. An effective learning tool to study is not provided besides a book.

With the Mari Belajar Jawi courseware, it can provide a learning tool which applicable to the kindergarten students, much more interesting contrast to the book, user friendly so that the students or teachers understand to use it, flexible and interactive. It will be easier for students get gain their knowledge, understand and memorizing on the process because the courseware have a few multimedia elements such as text, graphics, audio and animation. Hence, the students will not easily getting bored in the learning process.

In the next chapter, it will be cover the Literature Review and Project Methodology is ADDIE model.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

Literature review is a comprehensive surveys of publications in a specific field of study or related to a particular line of research, usually in the form as a list of references or an in – depth review of key words. A specific type of serial known as an annual review is denoted solely to the publication of literature reviews. Literature review is conducted to further confirm the terms, definition and its characteristics. Both local and international literatures were review through the literature can be finding. Recent research findings are the most appropriate literature review sources of the review. This review will help in designed methodology and help others to interpret on the research (Taylor, D. 2005).

Methodology refers to more than a simple set of methods rather it refers to the rationale and the philosophical assumptions that underline a particular study. Instructional design is the practice of arranging media to help learners and teachers transfer knowledge most effectively (Wikipedia, 2007). That ADDIE model for Instructional System Design (ISD) is a generic model that serves as the foundation for many ISD models in use today. ADDIE model include a five phases that are Analysis, Design, Development, Implementation and Evaluation. This design model is one many version of ISD models that have been developed for education and training.

2.2 Facts and Findings

In developing Mari Belajar Jawi courseware for kindergarten, fact and findings research references is important because it is can help to develop the project to get the best solution. Besides that, through the fact and findings also can state which technique the best will be using in developing this project based on problem statements.

2.2.1 Domain

Courseware a term that combines the words 'course' with 'software', is educational material intended as kits for teachers or trainers or as tutorials for students, usually packaged for use with a computer (Wikipedia, 2007). Courseware can encompass any knowledge area, but information technology subjects are most common. Courseware is frequently used for delivering education about the personal computer and its most popular business applications, such as word processing and spreadsheet programs. Courseware is also widely used in information technology industry certification programs. Courseware can include a material for instructor – led classes, material for self-directed computer – based training (CBT), web sites that offer interactive tutorials, material that is coordinated with distance learning, such as live classes conducted over the Internet and videos for use individually or as part of classes (Jing, Y., 2005).

The CD – ROM is the most common means of delivering courseware that is not offered online. For teachers and trainers, courseware content may include set – up information, a course plan, teaching notes and exercise

Courseware that will be developing is courseware for education. In this Mari Belajar Jawi courseware for kindergarten, the student can learn a Jawi only the basic learning. It is because this courseware where develop for a specific user is a kindergarten students between 4 years until 6 years old. Besides that, it is also suitable for teachers who teach this subject and parents. Hence, this courseware will develop in four modules that follow the step for the beginner's users. Among the