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JUDUL: MALAY IDIOMS FOR STANDARD 4 USING MOBILE PHONE

SESI PENGAJIAN: 2007/2008

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MALAY IDIOMS FOR STANDARD 4 USING MOBILE PHONE

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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2008

DECLARATION

I hereby declare that this project report entitled

MALAY IDIOMS FOR STANDARD 4 USING MOBILE PHONE

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

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DEDICATION

To my beloved parent and family

For my supervisor, Dr. Sazilah bt. Salam (UTeM)

And lastly to my beloved friend who have encouraged, guided, support and your strength are the source of my incredible inspiration every time.

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ABSTRACT

Malay idioms for standard 4 using mobile phone are an application for learning idioms. It is developed using Adobe Flash CS3 (Flash Lite 2) and mobile phone. This application has collection of idioms that are appropriate for primary school pupils. The main purpose of this applications developed is to help pupils with problem in understanding and memorizing idioms. Main technique use in this application is visual learning which is applied in both segment of grammar notes and idioms tutorial, using combination of graphic and voice. This technique is chosen as pupils can easily memorize and understand the information delivered. Other technique used is 2D animation. This technique is applied in idioms tutorial. The animation is categorized as simple animation. This project is fully functioning as teaching aid tool which enable the targeted user to use it with freedom as this application is delivered in mobile phone that can used anytime and anywhere.

ABSTRAK

Simpulan bahasa untuk darjah 4 adalah aplikasi yang dibina untuk murid-murid sekolah rendah dalam mempelajari simpulan bahasa. Ia dibina dengan menggunakan perisian Adobe Flash CS3 (Flash Lite 2) dan telefon. Tujuan aplikasi ini dibangunkan adalah untuk membantu murid-murid yang mempunyai masalah dalam memahami dan mengingati simpulan bahasa. Teknik visual learning adalah teknik utama yang diaplikasikan pada bahagian nota tatabahasa dan bahagian tutorial simpulan bahasa. Ia diaplikasikan dengan penggunaan gabungan grafik dan suara. Ini adalah untuk muridmurid mengingati dan memahami maklumat yang disampaikan apabila kedua-duanya digabungkan dan dipersembahkan menjadi satu di dalam projek ini. Teknik ini diaplikasikan pada tutorial simpulan bahasa. Animasi yang digunakan adalah animasi yang ringkas. Ia diaplikasikan supaya dapat memberikan kelainan dalam kaedah pembelajaran murid-murid di sekolah dengan menggunakan telefon. Ia juga dapat menarik minat murid-murid untuk belajar dan secara tidak langsung dapat memahami penggunaan simpulan bahasa tersebut. Terdapat 2 jenis pengujian yang dijalankan jaitu pengujian kepada fungsi dan pengujian terhadap kebolehgunaan. Projek ini dapat berfungsi sebagai alat bantuan dan mengajar yang membolehkan golongan sasaran belajar secara bebas kerana aplikasi ini dibangunkan didalam bentuk telefon yang boleh di bawa ke mana-mana dan bila-bila masa.

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LIST OF ABBREVIATIONS

UTeM

Universiti Teknikal Malaysia Melaka

FTMK

Faculty Information and Communication Technology

2D

Two Dimensional

CD ROM

Compact Disc Read Only Memory

JPEG

Joint Photographic Experts Group

BMP

Bitmap

GIF

Graphics Interchange Format

GHz

Giga Hertz

MHz

Mega Hertz

RAM

Random Access Memory

PC

Personal Computer

CHAPTER I

INTRODUCTION

1.1 Project Background

Information and Communication Technology (ICT) brings a new technology to change and ease the management for get the information that will more systematic and efficient. So, this project will be developed to help pupils improve their studies in the using mobile phone to enhance learning process and motivate them. The project is also to enhance the existing system. This application consist of Malay idioms for primary school syllabus and appropriate to be used for student Year 4. Besides that, this project can be used by individual who want to learn idioms and suitable for children whom are 10 years old.

Many idioms can be found in form of book and in a form of E-learning only. So, this application is the first project which will execute in a mobile phone. This mobile learning is to attract the student for memories the meaning of idiom which is used in doing their composition and help them when to answer in their examination. In other that, it also can help the student to use this idiom correctly. This application can help the pupils to use this idiom correctly in an interactive way and have exercise to get know whether pupils understand in using this idiom, because this application will be present by using element of multimedia such as text, graphics, audio, animations and can learning where they want, and when they want.

The existing multimedia learning application such as e-learning and courseware has the same concept and it is like transform from the computer into the mobile phone and the user looks different from the computer. Of course it is difference from the computer because the user can interact with the mobile phone. Other than that, the output can be generated from the exercise and it has a sound, video and animation. But the concept is still the same. The notes, the exercises, and the answer are still the same.

The Collection of idiom using the mobile phone is an experimental new concept of learning for educational. It is a new approach to use a mobile phone as instructional tool of learning. Basically the effectiveness of the application is not totally depends on it but it also depend on the user, the learner.

The technique that will be used in mobile learning is visual learning. This technique is a proven method in which ideas, concepts, data and other information are associated with images and represented graphically, some of the techniques used in visual learning to enhance thinking and learning skills. Lastly, this application has a quiz to test the student based on what they have been learn and mark will be generate automatically.

1.2 Problem Statement(s)

Currently, technology development is very important in education sector. There is a growing amount of student concerned with applying mobile technology to learning. Our children in primary school also now already know on how to use mobile phone although they are still young. So, this application to be develops because it can help in their learning process can easy and enjoyable.

The problem are student tend to forget the meaning of the idioms that have learn before. For the novice student especially student standard 4, they will face the difficulties of memorizing the meaning of idioms. So, the learning technique that will be used in mobile phone can help the student easier to memorize the idiom. Then, other factors that being used are how to build the project that will go to interact the student to enjoy the idioms learning process. The current system that is on the market is usually web based and CDs. The webs based are only having the meaning of the idioms (Kamus Istimewa Simpulan Bahasa Melayu) and not interactive because it only based on text. Then, its meaning is shown at the same page and not suitable for primary student. While, the courseware CD-ROM are interactive and interesting but the courseware cannot be bring anywhere and cannot be used in anytime. The usage is limited, not as mobile phone.

Besides that, the current collection of idioms is in book which means the current system is manually. So, this application that is going to be developing is suitable for primary school and have example given according to the usage of the idiom.

1.3 Objective

Below are the objectives for this project:

- To improve ICT skills with the new concept of educational learning in mobile phone and enhanced project that exist before.
- To do research on visual learning technique and accelerated technique that can be used for developing the m-learning used mobile phone.
- To provide mobile Malay Idioms in the interactive ways and enjoyable to learns idiom that can viewed anywhere and anytime.
- To help pupils, teachers and parents to use handphone as a supporting material in process of learning and teaching.

1.4 Scopes

To define the project and make sure the goal for the project reached the target. Below are the scopes for the project.

i) User

Target user is primary school students especially for student in standard 4.
 Therefore, the user of this application consists of student with 10 years old.
 It's also for parents are not having much time in their children study progress.

ii) Platform and multimedia elements scope

Suitable for all mobile phones with Flash Lite 2.0 technology but this
application will be tested in Nokia model only because the Nokia model is very
popular and the function also familiar.

• User must have mobile technologies which are handphones that has been installed with symbian OS, the operating system for handphone.

Table 1.1: Nokia mobile phone that support Flash Lite 2

Model	Screen Size	Official Prices	Supports
		(RM)	
Nokia 3230	176 x 208 pixels	930	Flash Lite 1.1 and 2
Nokia 5200	128 x 160 pixels	600	Flash Lite 1.0 and 1.1 and 2.0
Nokia 5300	240 x 320 pixels	785	Flash Lite 1.0 and 1.1 and 2.0
Nokia 6260	176 x 208 pixels	N/A	Flash Lite 1.1 and 2
Nokia 6300	320 x 240 pixels	1010	Flash Lite 1.0 and 1.1 and 2.0
Nokia 6620	N/A	N/A	Flash Lite 1.1 and 2
Nokia 6630	176 x 208 pixels	N/A	Flash Lite 1.1 and 2
Nokia 6670	176 x 208 pixels	N/A	Flash Lite 1.1 and 2
Nokia 6680	176 x 208 pixels	1050	Flash Lite 1.1 and 2
Nokia 6681	176 x 208 pixels	N/A	Flash Lite 1.1 and 2
Nokia 6682	176 x 208 pixels	N/A	Flash Lite 1.1 and 2
Nokia 7390	240 x 320 pixels	1550	Flash Lite 1.0 and 1.1 and 2.0
Nokia 7610	176 x 208 pixels	N/A	Flash Lite 1.1 and 2
Nokia N70	176 x 208 pixels	1085	Flash Lite 1.1 and 2
Nokia N90	352 x 416 pixels	1275	Flash Lite 1.1 and 2

1.5 Project Significance

The significance of this project is to help the pupils to better understand and will be learning idiom in subject Bahasa Melayu and to learn writing composition. It also can give profit to the school teacher, parent and pupils itself. This is because, easier for the pupils learning and teacher to teach their student with more enjoying in learning idiom. The parent also can use application to help their children in using the idiom when they are busy with their works. The benefit from this application is the learner or the user gain the learning process with the new concept. Other than that, this application also can be use at anywhere and anytime by the student whenever they want to make their self more understand about idiom.

1.6 Conclusion

As a conclusion, when the new project is fully implemented it will definitely help the students, parents and teachers in learning process and this application come out with new approaches.

The development of mobile learning is not easy as the existing system. This development need to combine the concept of e-learning, courseware to mobile concept. Basically mobile learning education is also an e-learning, but the concept is different from the manipulation and the style of a mobile application. At the end of the project, all the objectives hopefully can be achieved and the application can be developed successfully.

So, the next chapter will be covered are literature review and project methodology.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

The literature review and the project methodology briefly review the specific factor and research about the project and the significant between the earlier project and the existing project. Other than that, this chapter also will cover the methodology, schedule and milestone and review the hardware and software requirement that need for project development. All the information is gather from the internet, books and magazine.

2.2 Fact and Finding

Fact and finding is where the past research is used for this project. The research is used as a guide for finishing and getting ideas for the project. Other than past research, the internet and books also can be the source of getting knowledge related to project.

2.2.1 Domain

Mobile Learning is the exciting art of using mobile technologies to enhance the learning experience. The Mobile Learning project is designed to provide industry-relevant curriculum in a new leading-edge fashion. Students involved in this exciting new initiative will have access to learning materials, fellow learners and instructors anytime, anywhere. The project will develop is Malay Idioms.

2.2.2 Mobile learning

Many learning activities could be categorized as 'mobile learning'. Well-established resources such as books, audio cassettes and the like have provided opportunities for people to engage in learning activities in all manner of places for many years. However, while 'mobile learning' could encompass all kinds of activities where learning happens out of a formal classroom situation, the terms 'mobile learning' or 'm-learning' are used here to refer specifically to learning that is facilitated and enhanced by the use of digital mobile devices that can be carried and used anywhere and anytime. Such devices include:

- mobile phones
- PDAs (personal digital assistants)
- personal digital media players (eg iPods, MP3 players)
- · smart phones.

Whilst laptop computers, tablet personal computers (PCs) and Ultra-Mobile PCs (UMPCs) can also be used to facilitate mobile learning, the *M-learning Standards* currently focus on the suite of devices that are typically identified by their small screen, lack of standard keyboard and pocket-sized nature. Mobile learning is an enabling technology. Mobile technology is being used to increase profitability and reduce costs

by delivering training and communication that is truly just in time, just enough, and just as needed. Viewers and learners can watch whatever content they need, wherever they are, whenever they have a moment, and then immediately return to work and do the job safer, faster, better, or smarter.

Mobile Learning allows instructional designers and instructors to utilize the strengths of mobile platforms to bring a variety of new applications to the learning environment. Lee Ann Obringer describes some of the advantages of e-Learning that would also apply to the m-Learning. The numerous advantages of this type of technology enhanced training allow administrators to spend scarce training funds in other traditional areas or utilize them to further the advancement of technology assisted learning. The use of mobile learning to enhance the learning experiences of students and instructors in the education system are numerous. Primary, secondary, and post-secondary institutions can use this wireless technology to increase the learning opportunities and learning styles of all of the participants. Although the degree of interaction and experiences will vary, all those involved should benefit from the interaction with mobile learning technology.

e-Learning vs. m-Learning

According to Laouris and Eteokleous (2005), e-learning was dominated by the following terms:" multimedia, interactive, hyperlinked, media-rich," (Laouris & Eteokleous, 2005, p. 3). M-learning terms, however, exhibit a shift away from a media immersion experience, or a structured, activities, to words that express what are perceived as the primary attributes of a very different experience: "spontaneous, intimate, situated, connected, informal, lightweight, personal," (Laouris & Eteokleous, 2005, p. 3) Because "mobility is about increasing a learner's capacity to physically move their own learning environment as they move" (Barbosa & Geyer, 2005), the nature of the learner's interaction with instructional content is altered. Instead of immersing oneself into an environment that floods the senses with stimuli, such as that