# MOBILE APPLICATION BASED LEARNING: MARI BELAJAR SOLAT

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#### **BORANG PENGESAHAN STATUS TESIS\***

# JUDUL: MOBILE APPLICATION BASED LEARNING: MARI BELAJAR SOLAT

SESI PENGAJIAN : 2013/2014

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#### MOBILE APPLICATION BASED LEARNING: MARI BELAJAR SOLAT

# NOR HAIZATUL AKMA BT MOHD YUSOF

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

#### FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA 2013

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## DECLARATION

# I hereby declare that this project report entitled MOBILE APPLICATION BASED LEARNING: MARI BELAJAR SOLAT

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

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#### **DEDICATION**

Specially dedicated to my beloved parents and my family member

For my supervisor who guide and give me a lot of support, EN MOHD LUTFI BIN DOHALIT (UTEM)

# For my evaluators, EN MOHD ADILI BIN NORASIKIN (UTEM)

And lastly to my beloved friends and who have encouraged, guided and inspired me throughout my journey in education



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I would like to thanks my PSM supervisor, En Lutfi for all guidance, help, courage and advice for me in order for me to finish up this PSM successfully.

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#### ABSTRACT

Projek Sarjana Muda is required subject of the final year student in Universiti Teknikal Malaysia Melaka (UTeM). For PSM, each student needs to come out with a project. The project has a been chosen to be develop is a 'Mari Belajar Solat' using mobile application based learning 'Mari Belajar Solat' is a learning project because kids can learn the step by step of how to performing the Solat. The application was develop for children age within three to seven years old. This project combines four element of multimedia which text, graphic, audio and animation. The activity consists six questions. This project was developed using Adobe Flash CS6. They are lots of objective that what to be achieved from this project such as to children perform the Solat and attract the kids to learn using multimedia approaches. This project will be run on mobile phone which easier to bring anywhere.



#### ABSTRAK

Projek Sarjana Muda adalah salah satu subjek yang dilakukan oleh pelajar tahun akhir di Universiti Malaysia MElaka (UTeM). Untuk subjek PSM, setiap pelajar perlu menghasilkan projek.Projek yang telah dipilih adalah projek pembelajaran yang bertajuk "Mari Belajar Solat" untuk kanak-kanak menggunakan aplikasi untuk telefon mudah alih.Mempelajari solat adalah satu projek pembelajaran kerana kanak-kanak boleh belajar langkah-langkah untuk melaksanakan solat tersebut.Aplikasi ini dibangunkan untuk kanak-kanak berusia dalam lingkungan tiga hingga tujuh tahun.Projek ini menggabungkan empat elemen multimedia iaitu teks, grafik, audio, dan animasi.Projek ini telah dibagunkan dengan menngunakan Adobe Flash CS6. Beberapa objektif yang ingin dicapai daripada projek ini ialah membolehkan kanak-kanak untuk belajar Solat dan menarik perhatian menggunakan

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# LIST OF ABBREVIATIONS

PSM	-	Projek Sarjana Muda
PDA	-	Personal Digital Assistant
PSD	-	Photoshop Data File Extension
PNG	-	Portable Network Graphics
RAM	-	Random-Access Memory
SWF	-	Shockwave Flash
Wav	-	Waveform Audio File Format
GIF	-	Graphics Interchange Format
JPEG	-	Joint Photographic Experts Group
DVD-R	-	Digital Versatile Disc Recordable
CD	-	Compact Disc
M-Learning	-	Mobile Learning
MGBL	-	Mobile Game Based Learning
PC	-	Personal computer

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# **CHAPTER I**

#### **INTRODUCTION**

#### 1.1. Project Background

Solat is the most important thing that must do by Muslim around the world. Each Muslim does Solat every day as an obligation to their religion. Solat is the name for the prayers which are performed five times a day as a direct contact to the god. As is known, Solat has two main components which are the physical movements and the verbal components. For this reason, we discover the true sense of Solat since it will enable us to perform it in a deeper and more meaningful manner. Let's have a look at the Solat performed step by step. The movements of a Solat are as follows:

- Kiyam: standing up
- Ruku: bending down
- Secde: prostrating

In this project, mobile application based learning which entitles "Mari Belajar Solat" is developed to help the kids between ages 3-7 years is to set that step by step Solat in easy and fun way. The objectives that could be achieved while implementing this project, "Mari Belajar Solat" is to make an easier for kids to learn Solat in fun and interesting way. This application is about learning about the Solat performed step by step. After the learning process, this application also contain with fun activity which is Solat quiz, so kids can test their understanding of what have they learn from the application. The project is an application which is equipped with all interactive learning elements such as activities, graphic, and audio that can teach kids to Solat. This project will be deliverable on mobile phone which easier to bring and browsed anywhere and anytime.

#### **1.2 Problem Statements**

Nowadays, much kind of media application is release for example there are lots of mobile games and learning. But mostly the application is limit to quiz and games only. With this project, "Mari Belajar Solat", it will present the educational content in interactive and playful way through mobile devices. Currently, kids are using the book as the main element or reference in their learning process and they still not had been exposed to learning application through mobile compare to games application.

Using the current method of learning which is by book, kids usually not interested in its content and they will bored to learn more about the topics. Thus, kids find it hard to understand the Solat process and steps using the word and static pictures from the book. As an alternative, there are learning materials today use mobile based technologies as an alternative way to attract the kid's concentration in education.

#### 1.3 Objectives

The objectives of the project are describes briefly as following:

- i. To develop a Mari Belajar Solat mobile application based learning.
- To design interesting and attractive Mobile application based learning.
- iii. To investigate the effectiveness of using mobile app.

#### In this thesis, problems are investigated according to these questions:

- i. How to attract student in learning Solat?
- ii. How mobile application can attract student concentration in learning?
- iii. How to give positive impact to kids on solat.

#### 1.4 Scopes

The scopes of this project will include the term of target user, contents to be developed and deliverable. The scopes are described as following:

#### 1.4.1 Target User

Kids are the target user for this project. The age of the kids is around 3 until 7 years old.

#### 1.4.2 Contents

The contents to be developed cover the followings:

- i. Develop a mobile learning about Solat.
- ii. Develop a mobile application about Solat and activity
- iii. The product will use Adobe Flash CS6.

#### **1.4.2 Deliverable**

The product will be deliver using mobile Smartphone's which are compatible with Flash.

#### 1.5 Project Framework

Project framework for mobile application development to learning "Mari Belajar Solat" is using the design cycle iteration. In the first phase, as a developer, practices and activities, quiz will be reviewed. In developing this application, kids learn to exposure in prayer.

Developers will take into account the new models and develop technologies and design. By using Adobe Illustrator and Adobe Flash, developers can create interface and animation. The interface should be simple, interesting, nice and clear. So that can be understood by kids 3-7 year.

After complete the product development, it will test to examine consumer acceptance of products. In this case, the kids will be a tester. They will be given a mobile application where they will test the function and give feedback. Any errors, bugs or feedback during the test will be considered and modified to get better output and can improved the product.

#### **1.6 Project Significance**

This project will provide easy way to memorize child. The project that is been developed is focusing on using technology to help target users can understand and perform better. Features such as quiz and interactivity will help kids to understanding, performance and remember every each principle in performing Solat better. Below are some of the significant of the project:

#### i. To help the kids fast thinking

The aim is to give an easy way for the kids to memorize the step by step of the Solat . These activities will teach the kids to choose the correct answer.

#### ii. Platform for learning

Mobile application based learning is more interesting rather than just reading the book. The book is static and not interesting at all. Therefore, mobile application based learning is the best platform to teach them. This project will change the way to deliver the information. Using mobile application based learning can be an effective method. Mobile application learning approaches allows kids to access learning effectively because it is one of the hand-held devices instead of carrying books. Mobile is also more convenient to carry anywhere and at any time.

#### 1.7 Conclusion

This chapter is an introduction of mobile application based learning is to be developed. It describes the project background, statement of the problem, objectives, scope and significance of the project. This project can achieve the objectives. This educational program "Mari belajar Solat" tells to people about step by step Solat based on the reference materials. Thus, this project can be used as a reference for future generation.

For the next chapter, it will discuss about the literature related to mobile application and methodologies to be used to develop a mobile application based learning.

## **CHAPTER II**

# LITERATURE REVIEW

#### **2.0 Introduction**

This chapter will discuss about the working of the literature review related to mobile application based learning. The purpose is the research to develop knowledge that the published material in order to create knowledge during the project.

In addition, the literature is the source, referring to the study of a collection of materials published in selected areas such as articles, journals, theses, online library, technical "documents and case studies.

#### 2.1 Area of study

Nowadays, it will be difficult for kids to focus on their studies. This is because the books are not interesting and attractive. Mobile application has become a trend in the market, and the kids are more interested mobile phone. General definition of mobile learning is the knowledge transfer events, content, tools, and applications. Education is now become necessity in our daily life. Every subject which taught in school has both information and knowledge. Both knowledge have importance and clear aims.

#### 2.3 Solat and Technology

Prayer is speech and deed, beginning with the takbir and ended with regards to the conditions. Principe prayers must compulsory on individual who are already bahligh. Word is derived from the Arabic prayer which means prayer. The word prayer in Arabic means seeking the welfare of prayer and praise, while in fact contain definitions, face heart (soul) to God and His cause fear, and grow in the soul a sense of grandeur, greatness and perfection of his power.

According to figh term prayer is a form of worship which consists of movements, speeches, beginning with Takbiratul ihram caring and end with regards to certain conditions.

#### 2.4 Multimedia in Education

According to a study done by Brian A (2003) have shown that people remember 20% of what they hear, 40% of what they see and hear, but 70% of what they see, hear, and do. Education programs that utilize multimedia and interaction allow students to learn concepts more quickly and attract. Development of information technology and the ability to deliver digital information has become the most convenient communication techniques in the field of education. The most common technology to transmit information using multimedia and mobile application. The benefits of mobile application:

- i. Kids can study at any time and place they want. The size of a mobile phone is small and easy to be carried anywhere.
- ii. Fixed and 'read only'. Additionally can download free on goggle play.
- iii. Kids can get information easily and quiz. They just need a mobile phone or smartphone with multimedia capabilities and can download on goggle play.