

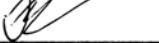
DECLARATION

I hereby declare that this project report entitled
HAJI :VISUALIZING LEARNING PPRCESS USING 2D ANIMATION

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

STUDENT : _____ Date : _____

(NOOR HAFIZAH BINTI HALIM)

SUPERVISOR : _____  Date : _____

(MRS. FARAH NADIA BINTI AZMAN)

DEDICATION

To my beloved mother and father, Halim and Zaiton and all family.
Supervisor, Mr. Hafiz bin Zakaria, Mrs Farah Nadia Azman for the guidance and idea.
Also beloved friends who give a support
And all testers.

ACKNOWLEDGEMENT

First of all, I would like to praise to the lord of god, Allah SWT blesses for the successful completion of my PSM and all the hard time I had through out the semester.

Then, I would like to express with my deepest gratitude to myself, because of all effort that I had give in this PSM, and to both of my father and my mother whose support and help me for the finance and comforted me when I'm depress.

I want to deeply indebted to Mr. Mohd Hafiz bin Zakaria and Mrs. Farah Nadia binti Azman as a supervisor for gives guidance and advice about the PSM 1 and how to do well, while writing the report and give good idea to finished report for PSM.

My house mate and friend colleagues from the Faculties of Information Technologies and Communication for supported me in my system.

ABSTRACT

PSM is a core subject for last year student who takes Bachelor Computer Science in Universiti Teknikal Malaysia Melaka. This subject is to give an experience of the student on how to build the real project before entering the real environment of work. My project is entitle 'Hajj : visualizing learning process using 2D animation'. This project is developed to help future pilgrims to do principal of hajj and help the future pilgrims to memorize the principal of hajj using animation. The approached that I used to build this project is visual learning process technique. Before I start the project I have distributed the questionnaire to some of family members that have fulfill the hajj pilgrims. I have done four chapters in my project, introduction, literature review and project methodology, analysis and design. I hope the project wills success and achieve the goals and objectives.

ABSTRAK

PSM adalah subjek wajib yang perlu diambil oleh semua pelajar tahun akhir Ijazah Sarjan Muda Sains Komputer di Universiti Teknikal Malaysia Melaka. Subjek ini memberi pengalaman kepada pelajar dalam membuat sistem yang sebenar sebelum melangkah ke alam pekerjaan yang sebenar. Tajuk projek saya ialah 'Hajj simplified : visualizing learning process using 2D animation. Projek ini dibangunkan untuk membantu bakal jemaah haji mengerjakan haji dan membantu mereka mengingati menerusi animasi. Pendekatan yang digunakan untuk membangunkan projek ini adalah teknik belajar secara visual. Sebelum projek ini dibangunkan saya telah melakukan beberapa temuramah dengan saudara yang telah mengerjakan haji. saya telah melaksanakan empat bab di dalam projek ini iaitu pengenalan, literature review dan projek metodologi, analisis dan rekabentuk. Saya berharap dapat menyiapkan projek dan mencapai matlamat dan objektif.

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LIST OF ABBREVIATIONS

Abbreviations	Word
CD	Compac disk
2D	2 dimensional
LTHM	Lembaga Tabung Haji Malaysia
PSM	Projek Sarjana Muda
MB	Megabite
RAM	Random Access Memory
LTHM	Lembaga Tabung Haji Malaysia

LIST OF ATTACHMENTS

ATTACHMENT	TITLE
1.1	Gantt Chart
1.2	Storyboard
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CHAPTER I

INTRODUCTION

1.1 Project Background

The animation that wants to be build is about, visualize learning process for future people who want to fulfill hajj. Before the future hajj go to *Mecca*, they have to make preparation. Hajj course is the way to learn about hajj. Hajj course is teaching person to do hajj with reading books, going to seminars and workshops, besides that we have learn about hajj in secondary school in form four. The 2D animation will cover the 6 pillar of hajj, the first pillar of hajj is *niyyah ihram*, the second is *wukuf at Arafah*, the third is *Tawaf*, the fourth is *saie*, fifth Shaving or get hair cut and *tertib* or *inorder* is the last pillar of hajj. The word "Hajj" literally means heading for an honourable place. The *Hajj* is a pilgrimage that occurs during the Islamic month of DhuHijjah in the city of Mecca. Every able-bodied Muslim who can afford to do so is obliged to make the pilgrimage to Mecca at least once in his or her lifetime.

Using this animation the hajj pilgrims will understand what they have to do after finish at one principal of hajj. In the CD have the illumination about hajj pillar to fulfill the obligatory pillar. It is the learning process to make people understand the step to fulfill the hajj.

1.2 Problem Statement

There are things that should be done by the person who intends to perform Hajj before leaving. To make sure all the future delegation understand the most important things about Hajj, they need to learn by reading books, going to seminars and workshops for training pilgrims. Future hajj can read books but they just can imagine from the book. Seminar that they have goes just gives transcription about the hajj note and some illustration that the guider made, the guider draw at white board to give explanation to the future hajj. At Workshop, the future hajj training using cupboard to do *tawaf*, but not the entire pillar hajj can they trained, other of the pillar hajj, they use video for make example to the future hajj to imagine and remember the step that they have to.

There are two differentiate principal of hajj and preliminary of hajj. The video that have in the internet is one of the elements that can be used to learn about hajj, but the video that have shown at Google website have combine the principal of hajj and preliminary of hajj. The people that watch the video cannot differentiate principal of hajj and preliminary of hajj.

Otherwise the future hajj can arrange a study session with the Imam of the community to help them to understand the major points as shown in the obligatory actions. From the entire source that they use to studied, there have no illustration about the picture and position of the place. Nowadays, there is only a video that have took at Mecca to indication future delegation of hajj. Some of the people that have watch the video cannot understand because there are so many people and the picture was so small. Some of the workshops that they have attend, the guider just draws the situation at the white board, it is so general to future delegation of hajj.

1.3 Objective

- **To do research on learning process and instructional technique using animation**

Researched on learning process technique, which can be use to develop the project and make people understand more using the CD. Find the best solution on how to give instruction.

- **To develop 2d animation on how to perform hajj**

This project is to make future hajj understand the position that they have to do when they arrive there. Using 2D animation the future hajj will know the flow and arrangement of the situation.

- **To serve as reference kit for future pilgrims**

Future pilgrims can repeat the CD at home and try to learn by their self. They can study on step of principal of hajj to fulfill the hajj pilgrims.

1.4 Scope

Project to be developed can be used by future delegation of hajj. This CD also can be use for guider that gives courses for future hajj and teacher at school can use the CD to teach student in form four to learn in hajj topic. The content of the application covers information about principal of hajj, such as place that they want to go and do hajj such as Arafah, Makkah, Kaabah and other else. This CD can give guidance for all future hajj to know what they must do after finish at one task.

In order to learn through animation, it's helpful to understand and learn principal of hajj. The following backgrounder will introduce future hajj to the situation that they have to go. Learning can be defined formally as the act, process, or experience of

gaining knowledge or skills. In contrast, memory can define the capacity of storing, retrieving, and acting on that knowledge. Learning strengthens the brain by building new pathways and increasing connections that we can rely on when we have learned. Definitions that are more complex add words such as comprehension and mastery through experience or study.

1.5 Project Significant

This system is build to future hajj pilgrims, to make they understand the environment and the position that they have to take to fulfill the pillar of hajj. Using this new style of learning the future hajj will get benefit and can learn using animation process. The future hajj not just reading the book, go to the seminars and have workshop to learn about things before they go to Mecca and fulfill the hajj pillar.

Using new learning concept of hajj, future hajj pilgrims just watch the CD to know the environment of hajj. Not necessary to them to go find someone that has to go Mecca just to know the situation and environment there, through pass experience, the future hajj pilgrims cannot imagine because there is a lot of step to fulfill hajj.

1.6 Expected Output

From this CD project, learning process through animation CD about hajj pillar will make people learn easier. This CD will have six tasks about hajj principal :

- i. Niyyah ihram*
- ii. Wukuf*
- iii. Tawaf*

- iv. *Saie*
- v. Shaving or get hair cut and
- vi. In order

The CD will show the place and position of the situation at Mecca. Using animation can give the real situation about the place that they want to go. The future hajj will learn through CD and prepared themselves before fulfill the obligatory of pillar hajj.

1.7 Conclusion

The project will teach the future pilgrims about the place and situation that they have to go to finish their journey of hajj. Through animation they will be a background about the place and where they have to do after finish the task.

The objective for this project is to do research about learning process and using instructional technique to give information about place. Attract people with moved animation and make the new way to learn the pillar hajj. There are two modules in this project that is background about the location and description about the hajj pillar.

This CD is build using element of multimedia. The main purpose of developing this project is to make future hajj learn about hajj pillar in easy ways using CD animation.

The next chapter will explain about literature values and project methodology that show the specific requirement, the facts and finding related with this project. There also have the milestone of this project.

CHAPTER II

LITERATURE RIVIEW AND PROJECT METHODOLOGY

2.1 Introduction

For this project there are two sub topics, it is literature review and project methodology. Literature review is showing the research and that related to this topic. The mean of literature reviews is critical look of the existing research that is significant to the work that you are carrying out. Literature review is important because it show the target of the project.

The research that found is about learning process, because before this the people uses the old version style of learning like reading book and goes to seminars to learn about the environment of the place that they have to go. Using animation is the new way to interact people to learn something new.

Project methodology shows the technique that use to make the project are cover and explain what will are in every type of work during this CD. The methodology that suitable for this project is Multimedia Production project methodology. This methodology is act as guider when developing the project. The production methodology is preproduction, production and post production.

2.2 Facts and Findings

Fact and finding is an activity that is intended to find out information about something. Fact finding also is an extremely important component of the communication process which presents its own special set of problems and opportunities to people working to increase the constructiveness of intractable conflicts. This section will be discussing about the domain of this project, the existing system and lastly the techniques that applicable used in to develop this project.

2.2.1 Domain

Marcia (1994) says that learning can define as act, process, or experience of gaining knowledge or skills. From learning process will help us to novices to expert and allows us to gain new knowledge and abilities. Learning is the acquisition and development of memories and behaviors, including skills, knowledge, understanding, values, and wisdom. It is the goal of education, and the product of experience. There is two ways of learning, Informal learning and formal learning. Informal learning is learning things in our day-to-day situations. It's what daily life practices teach us. It is learning from life, such as while playing. Formal learning is learning that takes place within a teacher-student relationship, such as in a school system.

Jehana (1987) says that the learning process can be examined as a three-tiered model. The three tiers model that she examines is Absorption, Integration and Expression. Absorption is the factor taking the external and bringing it into the internal. Absorption may involve of information for final exams; it may involve the day-to-day experiences of life; it may involve the shattering emotional impact of traumas. However, this emotional impact is not reacted to at this stage of the learning process. Absorption is the coming aware of information, whether for short or long term, from the whole body of constant information bombarding the physical senses at all times. Integrationist an internal process, where the knowledge recently gained is integrated with what is already in the mind. No mind ever starts out as a vacuum, despite the

efforts of generic television to assume this. Not all that is absorbed is integrated, that which falls into short-term memory. A deep and thorough internal integration of material is not necessary in all fields of study, although to some extent this takes place in all devotees of a subject, whether it be mathematics, engineering or art. This integration leaves its touches upon the person, and will affect the filtering for material to absorb in the future. Expression is essential for communication. It is a step shallowly expressed in the regurgitation of information on a quickly-studied exam, but when dealing with philosophy, art, or livelihood, it should be of more durable quality in other words, expression should be tempered with the fires of Integration. Expression may be involuntary (the fright reaction from a phobia), or it may be voluntary but the most fervent Expression is rooted within the internal regions of the being, and is not the shallow sort of expression related to acting the way other people expect you to act, for simply the purpose of scratching that itch of satisfaction. The most useful forms of Expression occur in taking that information which one has both absorbed and integrated, and then expressing it.

Richard K. Lowe (2004) Said that Computers now make it possible for even those with a basic technical background to produce highly interactive forms of animation that give users extensive control over the way subject matter is presented. Nevertheless, animations will remain more time-consuming and expensive to produce than their static predecessors. Current educational use of animation suggests two main underlying assumptions about their role in learning. Firstly, many animations are apparently used to fulfill an affective function, that is, to attract attention, engage the learner, and sustain motivation. Affectively-oriented animation often portrays activity that is humorous, spectacular, or bizarre but that may have little to do with facilitating comprehension of the subject matter itself. In tertiary education, animations are more likely to be used for a second and very different purpose; to fulfill a cognitive function. In this role, animations are intended to support students' cognitive processes that ultimately result in them understanding the subject matter. The main focus of this paper will be upon animation's potential to play this cognitive role. Benefits of animation are the current explosion in use of animation reflects the conviction of many educational

practitioners that it benefits learning. In some cases, this conviction is based upon a naïve view of the power of animation's affective characteristics. Other advocates for animation promote its potential benefits for information processing. They believe that it can help make difficult content easier to understand, particularly if the subject matter is dynamic; animations should be superior to static graphics in depicting dynamic content because animations can portray the dynamics *explicitly*. Static depictions must rely on added symbols to indicate temporal change indirectly.

However, the adding these ancillary graphics produces a more cluttered visual display that learners may find daunting. Further, in order to understand static representations of dynamic situations, the learner must interpret these ancillary symbols correctly and then 'mentally animate' the depiction in an appropriate fashion. This is a cognitively demanding task because static graphics only imply dynamics without fully specifying them. As a consequence, there is potential for learners to make errors when attempting to infer the actual dynamics from an impoverished static depiction. In contrast, animations do not require the learner to perform mental manipulations of the display material because the depicted situation's dynamics are available to be 'read off' directly.

A learner's processing resources can thus be devoted to the central task of understanding the content rather than being diverted to generating and running an internal dynamic mental model from a static external representation. For learners who otherwise lack the capacity to carry out the necessary cognitive processes on the basis of a static depiction alone, animation can have an *enabling* effect. However, animation can also benefit learners who already possess the necessary capacity but who could process the information more readily if its dynamic aspects were presented explicitly. In this case, animation is described as having a facilitative effect Schnotz & Rasch(1994).

2.2.2 Existing System

There is few ways to future pilgrims learn, using hajj courses, read books, seminars, workshop with the guider and see some documentary. Some of this part is prepared by Lembaga Tabung haji Malaysia for future pilgrims. Through the hajj courses the future hajj pilgrims cannot imagine the place and situation that they have to pass by, because reading book, hear the speech from the guider, look at the picture cannot give illustration about the place.

“Word & Image concerns itself with the study of the encounters, dialogues and mutual collaboration (or hostility) between verbal and visual languages, one of the prime new areas of humanistic criticism”. Taylor and Francis (2006) According to the information, word and image is a verbal communication. Verbal communication is very hard to take because it took one person that involve in this situation.

The screenshot shows a website page with the following structure:

- Navigation Menu:** Muka Depan | Berita | BicaraHaji | SoalJawab | BH | HM
- Table of Contents (Panduan Haji & Umrah):**
 1. Talbiah
 2. Rukun dan Wajib Haji
 3. Niat Mengertakan Haji
 4. Peta Miqat Haji dan Umrah
 5. Wuquf di Arafah
 6. Zakir-Zakar pada Hari Wuquf
 7. Tawaf dan Pengertian
 8. Panduan Permulaan dan Penghabisan Tawaf
 9. Kedudukan Ka'bah
 10. Saie dan Pengertian
 11. Kedudukan Safa & Marwah
 12. Larangan-Larangan Dalam Masa Ihram
 13. Bermalam (Mabit) di Muzdalifah
 14. Svarat-Svarat Melontar
 15. Melontar Jamrahul Aqabah pada 10 Dzulhijah atau Nihari di Mina
 16. Bermalam (Mabit) di Mina
 17. Melontar Jamrah pada 11, 12 dan 13 Dzulhijah di Mina (pada hari-hari Tasuqa)
 18. Rukun dan Wajib Umrah
 19. Niat Mengertakan Umrah
 20. Jenis-Jenis Hajj
 21. Ringkasan Cara-Cara Mengerjakan Haji
 22. Tawaf Wada' dan
- Main Content Area:**
 - BERITA:**

Jemaah Johor buat solat hajat
JOHOR BAHRU: Jemaah haji Johor mendirikan solat hajat dan bacaan Yassin hampir setiap hari ketika menunaikan haji di Makkah bagi mendoakan kesejahteraan dan keselamatan mangsa banjir di negeri ini. Ahli Rombongan Kerajaan Johor (RKJ) yang menunaikan haji, Alwi Mahdi, 57, berkata jemaah mengikuti perkembangan keadaan banjir di Johor ketika berada di Makkah dan bersedih dengan bencana itu. lagi...

 - Kumpulan pertama jemaah selamat tiba
 - 380 jemaah pertama berlepas pulang hari ini
 - Jemaah puji kemudahan haji
 - Jemaah tua dapat layanan VIP
 - BICARA HAJI:**

Ibadat haji modal insan Muslim
AL-IMAM Abu Hamid al-Ghazali menyatakan di dalam lhya' 'Ulum al-Din (Jilid 1 halaman 318): "Sesungguhnya ibadat haji itu termasuk dalam rukun dan tiang Islam. Ia ibadat sekali seumur hidup, penutup segala urusan, pelengkap Islam dan penyempurnaan agama. lagi..."

 - Persiapan perjalanan kerohanian
 - Haid tak jejas kesempurnaan ibadah haji
 - Kudrat, kemampuan pelengkap haji
 - Peneraju pengembara Islamik
 - SOAL JAWAB:**

Figure 2.1 : <http://www.bharian.com.my/Misc/HajiUmrah/index.html>