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^ Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

2D CARTOON - "PERTEMPURAN HANG TUAH DAN HANG JEBAT"

MUHD AZIZUL BIN AB GHANI

This report submitted in partial fulfillment of the requirement for the Bachelor of

Computer Science

(Interactive Media)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA 2005

DECLARATION

I hereby declare that this project report entitled

2D CARTOON - "PERTEMPURAN HANG TUAH DAN HANG JEBAT"

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

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ABSTRACT

Project Sarjana Muda 1(PSM) is a compulsory subject for the final year's students of Kolej Universiti Teknikal Kebangsaan Malaysia (KUTKM) especially interactive media students. PSM will give student to develop an individual project that related to the industry problem. This will expose students to do some research and analysis regarding to the topic that have been chosen. For the PSM, students have to choose the appropriate topic for the final year's project. This PSM has a seven chapter to finish based on the schedules that have been given to student. The chapters are introduction, literature review and project methodology, analysis, design, implementation, testing and conclusion. Each of these chapters has several sections to be completed, I have decided to make a 2D animation named "Pertempuran Hang Tuah dan Hang Jebat" for my PSM. Objective this project are caution especially student to battle Hang Tuah and Hang Jebat. Aside that exposes cultural Malay National namely fighting skill. This project can showed rotoscoping technique to developed animation. The scopes this project are generated short animation this narrated battle Hang Tuah and Hang Jebat. To developmental this animation, used three techniques namely Preproductions, Productions and Post-productions. To know the effectiveness of this project, testing is done to make sure whether this project has achieved the objectives. It is done by interviewing the students. During this Project Sarjana Muda (PSM), student can gain knowledge and experience especially in multimedia application and develop 2D animation. This will also help my skills in writing report and presentations skill which will be very useful and will help me to make some preparation into real working environments.

ABSTRAK

Projek Sarjana Muda(PSM) adalah subjek wajib bagi pelajar tahun akhir di Kolej Universiti Teknikal Kebangsaan Malaysia(KUTKM) terutamanya pelajar media interaktif. PSM memberi peluang kepada pelajar dalam membangunkan projek individu yang berkaitan masalah industri sekarang. Ianya juga mendedahkan pelajar kepada kajian dan analisis mengenai tajuk yang dipilih. Dalam PSM, pelajar diberi kebebasan untuk memilih tajuk bagi projek tahun akhir. PSM ini mengandungi tujuh bab hingga terhasilnya satu produk. Bab yang terdapat dalam PSM ialah pendahuluan, ulasan kesusasteraan dan kaedah projek, analisis, membangunkan, pelaksanaan, pengujian dan kesimpulan Bila kesemua 7 bab laporan telah siap, maka dapatlah saya menjalankan projek animasi 2D yang bertajuk "Pertempuran Hang Tuah dan Hang Jebat" bagi projek PSM. Objektif projek ini adalah untuk memperingatkan para pelajar kepada sejarah pertempuran Hang Tuah dan Hang Jebat. Disamping itu menunjukkan kesenian melayu iaitu langkah silat. Ia juga adalah untuk menunjukkan projek yang menggunakan proses "rotoscoping". Manakala skop bagi projek ini dibangukan adalah untuk menghasilkan sebuah animasi pendek yang menceritakan tentang pertempuran Hang Tuah dan Hang Jebat. Dalam membangunkan animasi, kaedah yang digunakan iaitu pra produksi, produksi dan post-produksi. Bagi mengetahui keberkesanan projek ini, pengujian dilakukan bagi mengetahui samada projek ini telah mencapai matlamat yang ditetapkan. Ianya melalui teknik temuduga ke atas para pelajar. Selepas menjalankan Projek Sarjana Muda(PSM), pelajar akan mendapat pengetahuan dan pengalaman terutamanya dalam penggunaan multimedia dan pembinaan animasi 2D. Ianya juga membantu dalam meningkatkan kemahiran dalam penulisan laporan dan pembentangan yang mana ianya amat berfaedah dan dapat menolong saya dalam menghadapi dunia pekerjaan yang sebenar.

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LIST OF ABBREAVIATIONS

2 dimension 2D

3 dimesion 3D

Projek Sarjana Muda **PSM**

Kolej Universiti Teknikal Kebangsaan Malaysia **KUTKM**

Fakulti Teknologi Maklumat dan Komunikasi **FTMK**

Information Technology IT

PC Personal computer

HTTP Hyper Text Transfer Protocol

Asymmetric Digital Subscriber Line **ADSL**

DSL Digital Subscriber Line

Japanese Cartoons Anime

Mouth Movements Lip Sync

CD-Rom **Compact Disc Rom**

Macromedia Flash MX Flash

ToonBoom Studio **ToonBoom**

MB Mega Bytes

Video Compact Disc VCD

Digital Versatile Disc DVD

Compact Disc CD

DAC Digital to analog conventer

HTTP Hyper text transfer Protocol

TV**Television**

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CHAPTER 1

INTRODUCTION

1.1 Project Background

The project is built as a requirement for PSM (Projek Sarjana Muda) and it is in hope to enhance the way of 2D animation presentation by creating a 2D animation story. The title of the project that has been proposed is "Pertempuran Hang Tuah dan Hang Jebat "a 2D Animation Story.

2D animation is one of the most popular techniques used by many designer or multimedia person to make cartoons, short movie or use it in the web design. Furthermore, 2D is not a new thing in multimedia fields. Actually 2D is a measurement with two dimensions on a flat plane. These dimensions run on an X an Y scale. There are many advantages using a 2D against 3D that you can find on the Internet and one of them is the process to create and manipulate objects are more easier using 2D. Therefore, people who watch cartoons usually prefer 2D cartoon then 3D because it's simple and funny look.

This project can show animation "Pertempuran Hang Tuah dan Hang Jebat".

This animation can show Hang Tuah and Hang Jebat strength in past time. Almost every Malaysian school child would know the folk story of Hang Tuah and Hang Jebat. Hang

Tuah is the most illustrious Malay hero in Malacca, leader of a closely-knit band of Malacca finest warriors.

For this project, it is hope that it will help kids to increase their knowledge besides build a positive character in their performance and also is estimated that the story can develop confidence in their social relationship with their friends and other people.

1.2 Problem Statement

The "Pertempuran Hang Tuah dan Hang Jebat" is a well known story by people in Malacca. This story can show Hang Tuah and Hang Jebat battle in village. During this project, there are various problem arise. The first problem is created and presented this animation. This problem is created beautiful background and creator.

To produced animation "Pertempuran Hang Tuah dan Hang Jebat" used by rotoscoping ruled, which problem is the real movie not clear. The problem being caused the real movie is old movie. The example movies are P.Ramlee movie.

This story as well make legendary story. This time, many people no learned of "Pertempuran Hang Tuah dan Hang Jebat" story. These problem can cause the children do not learned the Malacca story especially Hang Tuah and Hang Jebat story.

Nowadays, there are many interesting animation story in market, but some of entire learning product does not archive all the kids' requirement and interest. This new type of 2D animation story is one of the new products that can be more appropriate from current 2D animation story that available in market and its hope that it could improve and achieve a concept of learning task process for children or kids. For example

cartoons that have been published widely in Malaysian that is "Puteh" and "Silat Lagenda".

From the description, production 2D animation short stories that present "Pertempuran Hang Tuah dan Hang Jebat". This short story can be used or presented for tourism, student and all people strike Malacca legendary story. It also is all people will remember the Hang Tuah and Hang Jebat stories.

1.3 Objective

Each project must have objectives to make it success. It plays an important role for developers because developers can use it for references and to make the project development process leave efficiently without any disturb. To make this project succeed, these are the objectives of this project:

- a) To create 2d animation of "Pertempuran Hang Tuah dan Hang Jebat" using Macromedia Flash MX.
- b) To developed animation optioned to Rotoscoping technique.
- c) To enhance the way of 2D animation be presented by using an animation software that provide a good way on how to create a better character and environment for 2D animation
- d) To increase understanding user among value culture.

This 2D animation "Pertempuran Hang Tuah dan Hang Jebat" became step to give understanding user in legendary stories. In the story, people can see Hang Tuah and Hang Jebat battle.

e) To expose cultural Malay Nationality.

This story "Pertempuran Hang Tuah dan Hang Jebat" also exposes cultural Malay Nationality. In this story, people can see fighting skills during Hang Tuah and Hang Jebat battle.

1.4 Scope

The target users for this animation are extremely everyone especially for students. The good values in the animation can help to encourage those target users to increase their self-possession and that is the main aspects the developers want to send to all viewers as well as the funny parts in the animation itself. This short story will be present on CD and be able to run with Window Media Player and Quick Time player as a stage of platform.

While a main platform, animation software that is Macromedia Flash MX will be used to create 2D animation. This software is performs to designed and developed a character and background integrated with animation "Pertempuran Hang Tuah dan Hang Jebat". All animation will be done by 2-dimensional animation. Besides that, there is other software such as Adobe Photoshop CS, Adobe Illustrator CS, Sound Forge 6.0 and more software, as a related will be used as additional software

However, this animation will be present around 5 to 10 minutes. It does no long time as animation on television. For example animation is "Usop Sontorion", "Shrek", "Final Fantasy" and etc. It also will use Malay language. The cartoon might not be the same as that are made and produced by professional animator or designer like what we usually seen on television but the developers can try to make it goes as smoothly as possible.

Rotoscoping process to use in created 2D animation "Pertempuran Hang Tuah dan Hang Jebat". Real movie can to change to 2D animation used rotoscoping technique. This is a good technique for developed 2D animation from real movie.

1.5 Project Significance

This animation "Peperangan Hang Tuah dan Hang Jebat" is 2D animation project. This is maked one project in remind legendary story. In this project, all users can get to know Hang Tuah and Hang Jebat fight. This is showed how Hang Tuah kills Hang Jebat. These procedures make history in Malay history.

The project as well make easier student in commemorates Hang Tuah and Hang Jebat history. There project can help student in knowledge because via animations, student more prompt on story. Furthermore, all students can't read books or journals. We more prejudiced among animation from read books.

The project animation "Pertempuran Hang Tuah dan Hang Jebat" is first animation in promoted Hang Tuah and Hang Jebat history. This project will be adorable public in appear to recognize Malacca history. These would history didn't disappeared in the world.

This project also used rotoscoping technique. Pass through this technique, real movie changed to animation. In this project, P.Ramlee movie occurred material to rotoscoping process. This processed for attracted people in love classic story especially battle story.

This project also put in Malacca website. This project can help any department for promoted Malacca to public namely tourist in Malaysian or global. Besides that, this

project can help tourist in get to know Malacca history. For examples Hang Tuah and Hang Jebat fight in Malacca dominion.

1.6 Conclusion

This chapter discuss about introduction projects 2D animation namely "Pertempuran Hang Tuah dan Hang Jebat". This part can show story journey in develop animation project. In this chapter, any problem in build up animation "Pertempuran Hang Tuah dan Hang Jebat" will be discussed. This chapter also contained objective to develop projects. In the chapter also the target user will be identified. For after chapter will be cover literature review and projects methodology for these projects.

In this chapter, there will be discussion and the approach or passed research that related to the 2D Animation Story for kids and subject related into it. Besides that, the methodology of the project and the action plan will be added in the Gantt chart.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

The literature review is one of the least understood parts of a research project. A literature review is a summary of previous research on a topic. Literature reviews can be either a part of a large report of a research project, or it can be a bibliographic essay that is published separately in a scholarly journal. Either way, the purpose is the same, to review the scholarly literature relevant to the topic you are studying. The review will help we design your methodology and help others too interpret your research.

Our methodology, talent and technology insure a quality product from story board through production. Our specialists render highly sophisticated animation and scene simulations with startling realism.

2.2 Fact and Finding

This topic is on of crucial part in this sector. The section will maps out on different perspective which related to the project that will develop. Much research has been conducted and hopes that all of the existing research. In the topic focuses in how

far people have knowledge about animation from other learning medium such a book, internet and many more.

2.2.1 Animation definition

To animate means to bring to life and communicate feelings through storytelling. Students of all ages can create animations with new technologies. Telling a story that communicates emotions to an audience involves deep thinking, creativity and reflection.

The computer Animation Dictionary (1989) defines animation as producing the illusion of movement in a film or video by photographing. Otherwise has recording a series of single frame. Each showing in sequence and high speed give the illusion of movement. The individual frames can be produced by a variety of techniques form computer generated images to hand-drawn cells. This animation is not real motion, but perceived motion.

Connor(2004), claimed that "A picture says a thousand words,". It is very true with animation because the picture moves, and is alive. And there is usually other media such as sound to add another layer of meaning. The simplest animation is usually the most effective and often takes detailed planning and creativity

This animation involves delicate changes in a sequence of stationary image presented in time, fourth dimension and giving the illusion of connected movement. The term is normally functional, however to moving images designed either by hand or by computer. Sundberg(1998) say animation makes all moving image whatever on cinema, television or video clips incorporated into computer applications.