

**2D ANIMATION SHORT STORY (LAGENDA MAHSURI)**

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**2D ANIMATION SHORT STORY (LAGENDA MAHSURI)**

**NORULAKMA BT YA**

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

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY**

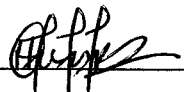
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I hereby declare that this project report entitled  
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is written by me and is my own effort and that no part has been plagiarized without citations.

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(DR FAAIZAH BINTI SHAHBODIN)

## **DEDICATION**

To my beloved parents, supervisor, lecturers, and my friends for giving assistant  
to complete this project successfully

## ACKNOWLEDGEMENTS

Alhamdulillah, praise to Allah s.w.t, I am very pleased and grateful of being able to finish my final project. First and foremost, I would like to thank my beloved parents and my family for their support and motivation throughout my project.

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## **ABSTRACT**

The system developed for Projek Sarjana Muda (PSM) is entitled 2D Animation Short Story (Lagenda Mahsuri) which is depending on the Malaysian folk story. Lagenda Mahsuri 2D animation short story is developed based on Malaysian culture like communication style, character and environment. The story also will insert with the poetry as a part of the story telling. The target users for this project are children around four years old and above. This project is in 2D Animation domain. Lip Synchronization and Camera Angles technique being apply in this project development process. Total timing of this project is eight minutes.

## **ABSTRAK**

Sistem ini dibangun untuk Projek Sarjana Muda (PSM), dikenali sebagai 2D Animation Short Story (Legenda Mahsuri), salah satu dari cerita rakyat Malaysia. Animasi Legenda Mahsuri 2D ini dibangun berasaskan kebudayaan Malaysia dari segi gaya komunikasi, persekitaran, sikap dan sebagainya. Cerita ini juga diselitkan dengan puisi dan penceritaan. Sasaran pengguna untuk projek ini adalah kanak-kanak yang berusia antara empat tahun dan ke atas. Projek ini adalah di bawah domain animasi 2 dimensi. Teknik Lips Synchronization dan Camera Angles telah digunakan dalam proses pembangunan projek ini. Masa tayangan cerita ini adalah lapan minit.



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**LIST OF ABBREVIATIONS**

FTMK	-	Fakulti Teknologi Maklumat dan Komunikasi
UTEM	-	Universiti Teknikal Malaysia Melaka
2D	-	Two Dimension
DVD	-	Digital Versatile Disk
RAM	-	Random Access Memory
PSM	-	Projek Sarjana Muda
USB	-	Universal Serial Bus
Kbps	-	Kilobit per second
Px	-	Pixel



## LIST OF ATTACHMENT

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Project Background**

The project that will be developed is a 2D animation short story. This project is based on the Malaysian folk story, Lagenda Mahsuri. This project's domain is in animation. The target users for this project are children of four years old and above. Lagenda Mahsuri 2D animation short story is developed based on the components of Malaysian culture such as communication style, character and environment. The story will also include the element of poetry as a part of the story telling.

Folk story is defined as a cultural expression in a particular community shown through spoken language and common parlance. The expression is germane to various cultural aspects comprising religion, belief system, customary law, economic activities, family system, social stratum, and social values within the community. In general, folk stories are inherited orally across generations.

## **1.2 Problem Statement**

Nowadays, parents are always busy with their own work and do not have enough time to tell their children about the old Malaysia cultures. Children can't imagine how the life and the environment of the old Malaysian community were. Therefore, with this 2D animation project, it provides a means of passing one of the folk stories in Malaysia entitled Lagenda Mahsuri. Children can easily understand the story with the support from the elements of sounds, character and movement.

Folk stories are adored by communities as they embed moral values, provide entertainment and education. When the availability of formal education such as school is still limited, folk stories serve as a means of education in family to shape children's attitude and behaviour. Nowadays, when the formal education is available, the folk stories still give significant functions and play an important role, especially to mould the characters of family members.

## **1.3 Objectives**

1. To apply animation principle such as Arcs of Motion, Squash and Stretch, Solid Drawing and Anticipation to develop 2d animation
2. To apply colour and sound techniques in developing 2D animation short story.
3. To apply the poetry as a part of the story telling and to show the essence of Malaysian culture with regards to situation and environment.

#### **1.4 Scope**

This is a 2d animation based project. The scope of this project is to present the folk story entitled Lagenda Mahsuri on 2d animation for children. The target users of this project are children of four years and above.

#### **1.5 Project Significance**

This project is significant for kindergarten teacher and children of four years and above. For teacher, they can let their students to watch the Legends of Mahsuri on 2D animation which presents movements and sounds, making it interesting to watch. Through this, children will understand the story easily and get attracted with the characters as well as the environments presented in the short story.

#### **1.6 Conclusion**

In this chapter, it explains the project background, problem statement, objectives, scope and project significance. Overall, this project is based on the information to develop 2D animation short story. This project needs a lot of researches from existing projects and also resources on the techniques in animation development to ensure high quality product will be produced.

In the next chapter, literature review and the content of the methodology will be presented which are important to guide the 2D animation development process.

## **CHAPTER II**

### **LITERATURE REVIEW & PROJECT METHODOLOGY**

#### **2.1 Introduction**

This chapter focuses on the review of literature and project methodology. It encompasses the project domain and existing system that include the comparisons of existing systems, explains in detail about animation techniques as well as identifies hardware and software used in this project development. Project methodology is used as a guide during project development.

#### **2.2 Domain**

This 2D animation is a type of animation, computer graphic and visualisation application. Currently, there are many applications in the market that have the same concepts which include local and foreign products. Since anime movie becomes one of the viewers' favourite especially among children, this 2D animation short story will become an appeal to viewers especially children.

##### **2.2.1 Definition of 2D animation**

“The creation of moving pictures in a two-dimensional environment, such as through traditional or cel animation or in computerized animation software is done

by sequencing consecutive images, or frames, that simulate motion by each image showing the next in a gradual progression of steps. The eye can be fooled into perceiving motion when these consecutive images are shown at a rate of 24 frames per second or faster". (Laybourne and Kit, 1998)

According to Schnotz and Lowe (2003), "the concept of animation can be characterized using three different levels of analysis. It is technical, semiotic and psychological. The technical level refers to the technical devices used as the producers and carriers of dynamic signs. With the evolution of the computer graphics industry, distinguishing between events captured by way of a camera or events completely generated by computer is becoming harder and irrelevant to learning issues. Second, there is a semiotic level, which refers to the type of sign that is the kind of dynamics that is conveyed in the representation. Third, there is a psychological level, which refers to the perceptual and cognitive processes involved when animations are observed and understood by learners".

Based on Baek and Layne (1988), 2D animation is "the process of generating a series of frames containing an object or objects so that each frame appears as an alteration of the previous frame in order to show motion".

"A series of varying images presented dynamically according to user action in ways that help the user to perceive a continuous change over time and develop a more appropriate mental model of the task" (Gonzales, 1996).

"Computer animation refers to any application which generates a series of frames, so that each frame appears as an alteration of the previous one and where the sequence of frames is determined either by the designer or user" (Betrancourt and Tversky's, 2000).

### 2.2.2 History of Malaysian Animation

The first example of animation in the world is the *wayang kulit*. Lotte Reiniger, a German animator was inspired to do her film, *The Adventures of Prince Achmed*, based on the *wayang kulit* form. “With its shape and articulating arms, it is the figures used in cut out animation” (1926) as she describes her work.

Animation in Malaysia began in 1946 with the setting up of the Malayan Film Unit which is now called *Filem Negara*. Table 2.1 shows the animation history by chronology.

**Table 2.1: Animation history by chronology**

<b>Years</b>	<b>Title</b>	<b>Description</b>
1983	<i>Hikayat Sang Kancil</i>	Production Company: Filem Negara Production Category : Short film animation Genre : Animation
1984-1987	<i>Sang Kancil dan Monyet, Sang Kancil dan Buaya, Gagak Yang Bijak, Arnab Yang Sombong, and Singa Yang Haloba</i>	Production Company: Filem Negara Production Category : Short film animation Genre : Animation
1980	<i>Usop Sontorian</i>	Production Company: MOY Productions Sdn. Bhd Category : Children's television series Genre : Animation, family
1997 - 1999	<i>Kampong Boy</i>	Production Company: Matinee Entertainment and Philippine Animation Studio Inc. Category : TV series

		Genre : Animation
1998	<i>Silat Lagenda</i>	Production Company: Peninsula Pictures Sdn. Bhd. Category : Feature Animation Genre : Adventure, Animation Duration: 90 min
1998-1999	<i>Keluang Man</i>	Production Company : Quest Animation Sdn Bhd Category : Children's television series Genre : Animation, superhero Duration : 22 min per episode
2001	<i>Putih</i>	Production Company: Fine Animation Sdn. Bhd. Category : Feature Animation Genre : Animation, Family Duration: 90 min
2007	<i>Bola Kampung</i>	Production Company : Animasia Studio Sdn. Bhd Category :Children's television series Genre : Animation, Children's, Sports Duration : 22 minutes per episode Number of Episodes : 26
2007	<i>Budak Lapok</i>	Production Company : Matahari Animation & Production Sdn. Bhd. Category : Feature Animation Genre : Animation, Comedy Duration : 90 min