

A DEVELOPMENT OF 2D VECTOR BASED ANIMATION THEMED MOTHER'S DAY



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

## BORANG PENGESAHAN STATUS LAPORAN

JUDUL: [A DEVELOPMENT OF 2D VECTOR BASED ANIMATION THEMED MOTHER'S DAY]

SESI PENGAJIAN: [2020 / 2021]

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A DEVELOPMENT OF 2D VECTOR BASED ANIMATION THEMED MOTHER'S DAY

AHMAD AMIR BIN OTHMAN



This report is submitted in partial fulfillment of the requirements for the Bachelor of [Computer Science (Software Development)] with Honours.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI  
TEKNIKAL MALAYSIA MELAKA

[2021]

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## DEDICATION

This Year End Project I am dedicated to all mothers around the world. Your sacrifices will not be forgotten. Thank you for giving birth to us, giving us guidance and undivided love. Always protect and take care of us until we grow up. Without a mother, who are we students who make our family, nation and country fragrant. May the sacrifice and kindness of the mother be blessed by the Almighty God.

Aamiin.



## ACKNOWLEDGEMENTS

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This appreciation is also addressed to both my parents, Mrs. Siti Zaleha binti Bujal and Mr. Othman bin Md. Jan who gave me too much support and encouragement throughout the course of this study. Not to forget the family, comrades and loved ones who also helped and gave support to complete this project. All your guidance, advice and kindness will not be forgotten.

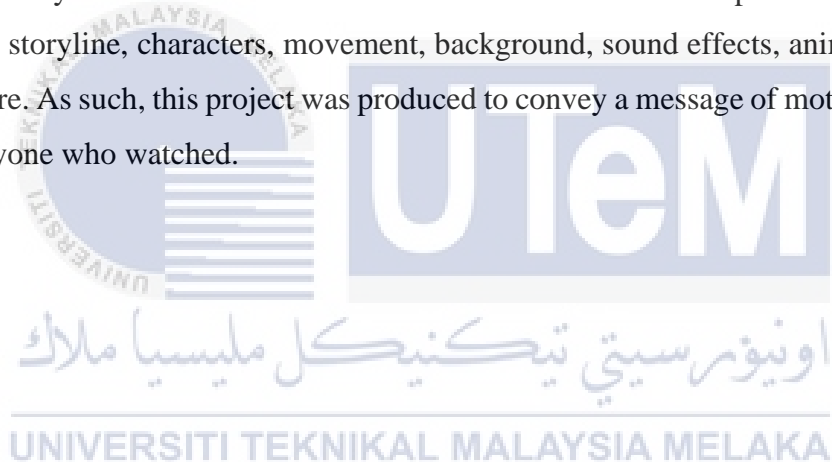
May the study conducted will be blessed by God Almighty.

Thank You.



## ABSTRACT

In this very modern and rapid development of technology, various technologies and techniques of animation production have shifted from traditional to modern methods. That is from hand painting methods to digital painting or pixels. Similarly pixels graphics shift to vector graphics that are clearer and smoother. Nowadays, many animations are produced using vector-based. The animations are produced to attract the interest of all groups not only for children, but everyone is very interested in animation regardless of genre. Not only that, animation can also be used as a medium to convey a message and touch the emotions of the audience. The analysis shows that there are several elements needed to produce an animation such as, script, storyline, characters, movement, background, sound effects, animation special effects and more. As such, this project was produced to convey a message of motherly sacrifice and love to anyone who watched.



## ABSTRAK

Dalam perkembangan teknologi yang sungguh moden dan pesat ini, pelbagai teknologi dan teknik penghasilan animasi sudah beralih dari tradisional kepada kaedah moden. Iaitu dari kaedah lukisan tangan kepada lukisan digital atau pixels. Begitu juga pixels graphics beralih kepada vector graphics yang lebih jelas dan halus. Pada zaman kini, banyak animasi yang dihasilkan menggunakan vector-based. Animasi-animasi tersebut dihasilkan bagi menarik minat semua golongan bukan sahaja untuk kanak-kanak, malah semua orang sangat meminati animasi tidak kira apa jua genre. Bukan itu sahaja, animasi juga mampu dijadikan medium untuk menyampaikan mesej dan menyentuh emosi penonton. Analisis menunjukkan bahawa terdapat beberapa elemen yang diperlukan bagi menghasilkan sebuah animasi seperti, skrip, jalan cerita, karakter, pergerakan, latar belakang, kesan bunyi, kesan khas animasi dan banyak lagi. Dengan itu, projek ini dihasilkan bagi menyampaikan mesej mengenai pengorbanan dan kasih sayang ibu kepada kepada sesiapa sahaja yang menonton.



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## LIST OF ABBREVIATIONS

**FYP** - **Final Year Project**





## CHAPTER 1. INTRODUCTION

### 1.1 Introduction

Mother's Day is a celebration honoring the mother of the family, as well as motherhood, maternal bonds, and the influence of mothers in society. It is celebrated on various days in many parts of the world, most commonly in the months of March or May. Commercialisation of Mother's Day has definitely come to Malaysia. So you will see huge racks of Mother's Day cards for sale, gifts suggestions in the malls and shops, and numerous public festive events in major cities like Kuala Lumpur. But, the private side of the holiday also lives on, where families simply spend time together and let Mom know they appreciate her.

This 2D animation aims to give awareness of a mother's love for us. In addition, the animation can attract the audience to watch this short animation by all ages. Next, in Malaysia there has never been an animation company that delivers a message through a short 2D animation, so I would like to convey a message by producing a 2D animation that is able to impact the audience.

The expected outcome is that the audience will take lessons from the message conveyed from the 2D animation themed Mother's Day in addition to the delivery of the message through this 2D animation will enhance the story to be more captivating and beautifully grabs the emotions when presented to the audience.

## 1.2 Problem statements

The development of this 2D vector based animation aims to give awareness of a mother's love for us. In addition, the animation can attract the audience to watch this short animation by all ages. Next, in Malaysia there has never been an animation company that delivers a message through a short 2D vector based animation, so I would like to convey a message by producing a 2D vector based animation that is able to impact the audience.

## 1.3 Objectives

- i. To investigate 2D vector based animation technique in message delivery about mother's love and sacrifice.
- ii. To produce a 2D vector based animation in conjunction with Mother's Day.
- iii. To assess the effectiveness of vector based animation technique in message delivery mother's love and sacrifice.

## 1.4 Scope

This Mother's Day themed 2D animation gives a deep message to the viewers who watch this animation. Therefore, it will make the audience aware of the value of a mother's love and sacrifice in raising and educating her child to become an excellent human being in the future. Other than that, this 2D animation will grab the audience's attention and share the same feeling as what is presented in this 2D animation.

## 1.5 Project Significance

The parties that will benefit from this project are the sponsors to promote their products in this animation. The contribution from this project is that it gives awareness to young people, especially those who still have mothers, to appreciate mothers as long as they are alive.

## 1.6 Conclusion

The expected outcome is that the audience will take lessons from the message conveyed from the 2D animation themed Mother's Day in addition to the delivery of the message through this 2D animation will enhance the story to be more captivating and beautifully grabs the emotions when presented to the audience.



## CHAPTER 2. LITERATURE REVIEW AND PROJECT METHODOLOGY

### 2.1 Introduction

In this chapter, the researcher will review and explain about the effectiveness of animation in conveying the message and make the audience aware of the great sacrifice of a mother in caring for and raising children. Next to study whether the delivery of the message through animation can attract the attention and emotions of the audience as well as understand the content presented in an animation.

### 2.2 Domain

The domain I chose for this project was Mother's Day themed 2D Vector -Based Animation Development. What is 2D vector animation? 2D vector animation is the term often used when referring to traditional hand-drawn animation, but it can also refer to computer vector animations that adopts the techniques of traditional animation.

Vector-based animations, meaning computer generated 2D animations, uses the exact same techniques as traditional animation, but benefits from the lack of physical objects needed to make traditional 2D animations, as well as the ability to use computer interpolation to same time.

This 2D animation aims to give awareness of a mother's love for us. In addition, the animation can attract viewers to watch this short animation by all ages. Next, in Malaysia there

has never been an animation company that gives orders through short 2D animations, so I want to deliver orders by producing 2D animations that can make an impact on the audience.

## 2.3 Existing Animation

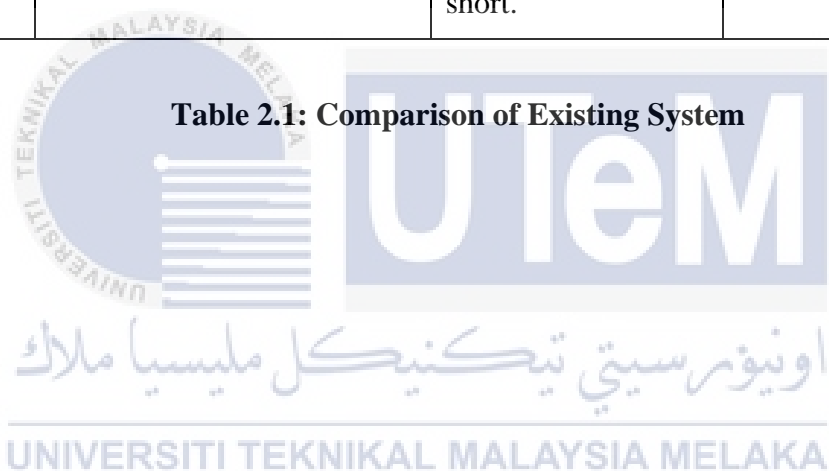
### 2.3.1 Comparison of Existing Animation

The purpose of the comparison between existing animation is to analyse the differentiation of those animation. The aspect that will be compared is in terms of animation style, animation quality, advantages and disadvantages

<b>Title</b>	<b>A Day of a MOTHER - 2D Animated Short Film</b>	<b>2D Animation - Mother's Day</b>	<b>Mother's Day Short Animation</b>
<b>Channel</b>	Dream2Animate	Sewaro Entertainment	Gilang arik
<b>Source</b>	YouTube	YouTube	YouTube
<b>Target Audience</b>	Everyone	Everyone	Everyone
<b>Language</b>	English	English	English
<b>Duration</b>	1:14 Minutes	0:36 Seconds	1:51 Minutes
<b>Animation Style</b>	Digital Drawing Based	Vector Based	Digital Drawing, Vector Based
<b>Animation Quality</b>	Medium	Low	High
<b>Uploaded</b>	15 May 2017	12 May 2021	21 December 2016
<b>Likes</b>	94 Likes (26 Jun 2021)	1 like (26 Jun 2021)	1.6K Likes (26 Jun 2021)
<b>Dislikes</b>	2 Dislikes (26 Jun 2021)	0 Dislikes (26 Jun 2021)	77 Dislikes (26 Jun 2021)
<b>Views</b>	4,782 Views (26 Jun 2021)	11 Views (26 Jun 2021)	116,374 Views (26 Jun 2021)

<b>Subscribers</b>	6.33K Subs (26 Jun 2021)	4 Subs (26 Jun 2021)	265 Subs (26 Jun 2021)
<b>Comments</b>	5 Comments (26 Jun 2021)	0 Comments (26 Jun 2021)	25 Comments (26 Jun 2021)
<b>Advantages</b>	Have message about mother's sacrifice, Have background music	Have background music, Use cloud dialog	Good animation, Have message about mother's sacrifice, Have background music
<b>Disadvantages</b>	Lack of dialog and voiceover	Lack of dialog and voiceover, Unclear message, Video too short.	No dialog and voiceover

**Table 2.1: Comparison of Existing System**



### A Day of a MOTHER - 2D Animated Short Film



### 2D Animation - Mother's Day



### Mother's Day Short Animation



## 2.4 Project Methodology

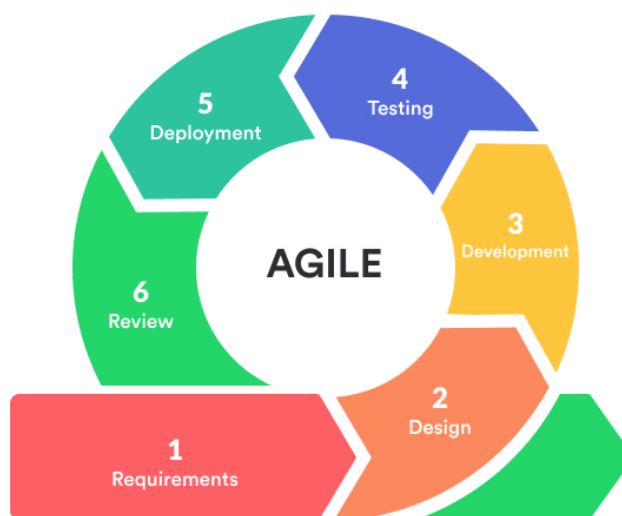


Figure 2.5: Waterfall Methodology

On this topic will be explained in detail about the methodology used to produce animation. The methodology used is Agile Methodology. Agile methodology is a project management methodology characterized by building products using the short work cycles required for rapid production and continuous review.

The first phase in the Agile Methodology is conditional, made to find information on Mother's Day and the history of Mother's Day in Malaysia. Check out animated videos on the YouTube website about 2D animation and Mother's Day themed 2D animation. Then some other requirements are required such as software requirements and hardware requirements. Various software is required to produce animations such as MS Powerpoint, Premiere Pro CC 2019, Audacity and so on. Tools such as laptops are also required for software.

The next phase is. This phase is made based on the needs that have been known for sure in the first phase. During this phase, writing the script and storyline are the initial steps to producing the animation. Next are the characters, models, scenery and backdrops that fit the storyline. The next step is to make a storyboard to get a clear picture and fit the Mother's Day themed storyline.