

**A DEVELOPMENT OF 2D ANIME STYLE ANIMATION TO SPREAD  
AWARENESS ABOUT TOURETTE SYNDROME**



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A DEVELOPMENT OF 2D ANIME STYLE ANIMATION TO SPREAD  
AWARENESS ABOUT TOURETTE SYNDROME.

**NUR AMIRAH NABILAH BINTI MUHAMMAD SUKRI**



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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
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2021

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I hereby declare that this project report entitled  
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## DEDICATION

This report is dedicated to my great parents. They always been a great inspiration to me and have always provided companionship. they also support me from the beginning of my studies with all their effort.

Besides, this report is also dedicated to my supervisor, Mr Shahril Bin Parumo, who has been a great source of motivation, comments, and suggestions to ensure that this project is completed on time.

Finally, this report is dedicated to all of my dear friends who have always encouraged, guided, and inspired me throughout the entire process. I will always be grateful for everything they have done.



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First and foremost, I would like to thank Allah SWT for providing me with the strength and health to complete this project's entire process. This project cannot be developed or completed without blessings.

Besides, I want to thank my beloved parents for their unending moral support and understanding of my work. There was also a lot of guidance and advice given to me to help me finish my project. In addition, I'd like to thank my entire class for their assistance with the development of this project.

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## ABSTRACT

Tourette Syndrome is a neurological condition characterized by uncontrollable repetitive movements or involuntary sounds known as tics. Someone with Tourette's syndrome, for example, may blink repeatedly. Unintentionally, some people can blur random words or make a grunting sound. Currently, the public in Malaysia is unaware of Tourette Syndrome. They assumed it was just something people did to gain attention or clout on social media. This digital 2D animation creates to raise public awareness of Tourette Syndrome. This approach will entice more viewers to watch and learn more about Tourette syndrome. This 2D animation will include the importance to know and understand about Tourette. This 2D animation aims to raise awareness of Tourette Syndrome to the public. Besides, a 2D animation will attract more audiences regardless of their age or gender. This 2D animation will involving the current trend which is 'Anime' style. Worldwide know that 'Anime' inspires imagination. It opens up a world full of possibilities and makes a lot of people fall in love with fictional characters. The subtle look on the characters design and also the splendid drawing of scenery captivated people eyes to watch more. Other than that, a 2D animation adds fun to the story and motivates one to look for more information about Tourette Syndrome. The expected outcome is the public open their minds and gain new knowledge on how to deal when meeting people with Tourette's. Moreover, using a 2D animation will enhance the story to be more captivating and beautifully grabs the emotions to showcase it to the public audience.

## ABSTRAK

Tourette Syndrome adalah keadaan neurologi yang dicirikan oleh pergerakan berulang yang tidak terkawal atau bunyi sukarela yang dikenali sebagai tics. Seseorang yang menghadapi sindrom Tourette, mungkin mengalami mata yang kerap berkelip. Dengan secara tidak sengaja, sebilangan orang mengeluarkan kata-kata secara rawak atau mengeluarkan suara yang menggerutu. Kini, orang ramai di Malaysia tidak mengetahui mengenai Tourette Syndrome. Mereka menganggap itu hanyalah sesuatu yang dilakukan orang untuk mendapatkan perhatian atau pengaruh di media sosial. Animasi 2D digital ini dibuat untuk meningkatkan kesedaran orang ramai mengenai Tourette Syndrome. Pendekatan ini akan menarik lebih banyak penonton untuk menonton dan mengetahui lebih lanjut mengenai sindrom Tourette. Animasi 2D ini akan merangkumi kepentingan untuk mengetahui dan memahami mengenai Tourette. Animasi 2D ini bertujuan untuk meningkatkan kesedaran mengenai Tourette Syndrome kepada orang ramai. Selain itu, animasi 2D akan menarik lebih banyak penonton tanpa mengira usia atau jantina mereka. Animasi 2D ini akan melibatkan trend semasa iaitu gaya 'Anime'. Seluruh dunia mengetahui bahawa 'Anime' memberi inspirasi kepada imaginasi. Ini membuka dunia yang penuh dengan kemungkinan dan membuat banyak orang jatuh cinta dengan watak fiksyen. Tampilan halus pada reka bentuk watak dan juga lukisan pemandangan yang indah memikat mata orang untuk menonton lebih banyak lagi. Selain itu, animasi 2D menambah keseronokan kepada cerita dan memotivasi seseorang untuk mencari lebih banyak maklumat mengenai Tourette Syndrome. Hasil yang diharapkan adalah orang ramai yang membuka minda mereka dan memperoleh pengetahuan baru mengenai bagaimana menangani ketika bertemu orang dengan Tourette. Lebih-lebih lagi, menggunakan animasi 2D akan meningkatkan cerita menjadi lebih menawan dan menarik emosi untuk mempamerkannya kepada khalayak umum.



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## LIST OF ABBREVIATIONS

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



**LIST OF ATTACHMENTS**

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## CHAPTER 1: INTRODUCTION

### 1.1 Introduction

Tourette Syndrome is a neurological condition that includes repeated movements or involuntary sounds called tics, which cannot be controlled. For example, someone with Tourette's could blink repeatedly. Some people can blur random words or make a grunting sound unintentionally. Presently in Malaysia, the public does not know about Tourette Syndrome. They thought it just something that people do to gain attention or gain clout on social media.

This digital 2D animation is implemented to spread awareness of Tourette Syndrome towards the public. It will be included the importance to know and understand about Tourette. Other than that, a 2D animation adds fun to the story and motivates one to look for more information about Tourette Syndrome.

Finally, hopefully the audience who watch this 2D animation will be able to open their mind and gain new knowledge on how to deal when meeting people with Tourette's. Moreover, using a 2D animation will enhance the story to be more captivating and beautifully grabs the emotions to showcase it to the public audience.

## 1.2 Problem Statement

Tourette Syndrome is a disease that is not commonly known by many people. Many people tend to ignore something that they are unfamiliar with and let it slide just because people around them do not diagnose with a particular disease, in this case, Tourette Syndrome. Presently in Malaysia, people do not know or even care about the person who was diagnosed with Tourette Syndrome. A parent who is uneducated about this disease commonly has the thought that their child just wants attention from them. This behavior can cause problems to the child including anxiety, depression, and low self-esteem, which can all lead to poorer psychosocial functioning and quality of life (QoL). It is estimated that 1 to 10 in 1,000 children are affected and is more common in males than females. It always starts before age 18, usually between the ages of 5 and 9.

The development of 2D animation is a part of the initiative to spread awareness about Tourette Syndrome. This approach will include the importance to know and understand Tourette Syndrome. Thus, people especially children who diagnosed with Tourette are not being bullied or discriminated against by society. This 2D animation will attract more viewers to watch and learn more about Tourette since 'Anime' style will be used to enhance the action, expression, and emotion that the characters in the 2D animation wanted to portray. 2D animation is widely known as the best medium to communicate a purpose to the target audience. It makes a story easy that both small children and adults can understand, and it connects people over the world in a way sometimes writing and live-action films cannot.

## 1.3 Objective

This project embarks on the following objectives:

1. To investigate 2d animation technique for Tourette Syndrome awareness.
2. To develop a 2d animation for Tourette Syndrome awareness.
3. To evaluate the effectiveness of a 2d animation for Tourette Syndrome awareness.

#### 1.4 Scope of the project

This 2D animation will be giving pieces of information, and the importance to the public audiences who want to know and learn more about Tourette's Syndrome. Therefore, it will spread awareness about Tourette Syndrome among themselves and people around them. Besides, this 2D animation can give a better understanding and beneficial to the public about Tourette since this animation will portray the life of a person who was diagnosed with Tourette. Other than that, the usage of 2D animation will attract the public regardless of their age or gender.

#### 1.5 Project Significance

This project will help people to open their mind and gain new knowledge on how to deal when meeting people with Tourette's. Moreover, using a 2D animation will enhance the story to be more captivating and beautifully grabs the emotions to showcase it to the public audience. Thus, the public audience can share and relate the same feelings as the 2D animation wanted to convey.

#### 1.6 Conclusion

This chapter discusses the overview of "A Development of 2D Anime Style Animation to Spread Awareness about Tourette Syndrome." that hopefully can attract more people to know and learn more on Tourette Syndrome. Based on the problem statement, three objectives can come out for this project which are to investigate 2d animation technique for Tourette Syndrome awareness, to develop a 2d animation for Tourette Syndrome awareness and to evaluate the effectiveness of a 2d animation for Tourette Syndrome awareness. These three objectives will need to achieve by the end of this project. In the scope of the project, target users and the content for this project are stated. This 2D animation will be one of the best medium to communicate a purpose as it will make a story easy that both children and adults can understand and enjoy.

## CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY

### 2.1 Introduction

The main goal of this chapter is to review the literature on any previous project or product that has been addressed in conjunction with this one. The previous project or product is measured and compared, and then a problem that could contribute to this project is identified. Comparison is made based on the content, multimedia element, and design. This chapter will explain the methodology used in the project's process. This chapter will go over the software and hardware requirements that are needed for this project. While making this project, proper equipment, software and hardware are required to make sure the project is possible.

### 2.2 Domain

#### 2.2.1 Animation

Animation is a technique that manipulates figures to make them appear to move. Traditional animation, 2D animation, 3D animation, Motion Graphics, and Stop Motion are all types of animation. One of the most common types of animation is 2D animation. It's widely used to make animated movies, cartoons, marketing videos, advertisements, corporate presentations, educational materials, video games, and a variety of other things. The art of creating movement in a two-dimensional space is known as 2D animation. This includes characters, creatures, special effects, and backgrounds. Animated videos have a significant impact on the audience in three ways, visual, auditory, and kinesthetic. Thus, 2D animation is chosen for this project. This 2D animation is implemented to spread awareness of Tourette Syndrome towards the public.

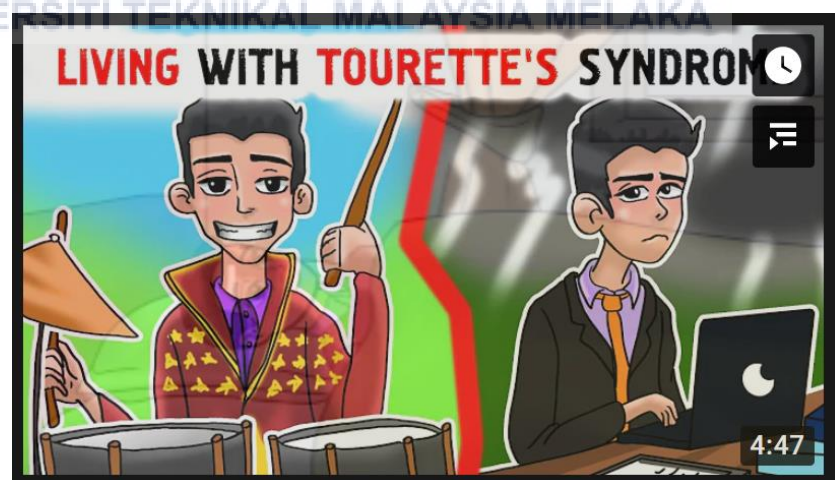
### 2.2.2 Animation Technique

This 2D animation will involving the current trend which is ‘Anime’ style. Anime is short for animation, specifically Japanese animation. It is a diversified medium with unique production methods that have evolved in reaction to new technologies. It mixes graphic art, characterization, cinematography, and other creative and individualistic techniques. Anime is well-known for its ability to inspires imaginations all over the world. It opens a world full of possibilities and makes a lot of people fall in love with fictional characters. The subtle look on the characters design and the splendid drawing of scenery captivated people eyes to watch more.

### 2.3 Existing System

The existing 2D animation videos can be numerous found on platform like YouTube. These are the three examples of the 2D animation videos.

(a) “Living with Tourette's syndrome - Story time animated” by STORY TIME.



**Figure 2.1 Thumbnail of “Living with Tourette's syndrome - Story time animated” by STORY TIME.**

This video tells the story of Oliver Sacks who is a neurologist. He met with a patient's name is Ray. When he was 4, he was diagnosed

with Tourette’s syndrome. People with this syndrome demonstrate an excess of nervous energy and various convulsions: tics, twitches, cries, gestures and so on. Tourette’s syndrome has several forms. He met Ray when Ray was 24 years old. Ray always got into all sorts of ridiculous situations because of his aggressiveness, temper and impudence. His uncontrolled rage even threatened his marriage Every time when things got tough, Ray turned to music for healing. While playing the drums, his tics caused by the syndrome transformed into wonderful improvisations. Oliver Sacks conclude that reducing dopamine activity in the blood is a solution in this case and prescribed an appropriate medicine called haloperidol.

(b) “Batik Girl - 2D animated short film” by The R&D Studio

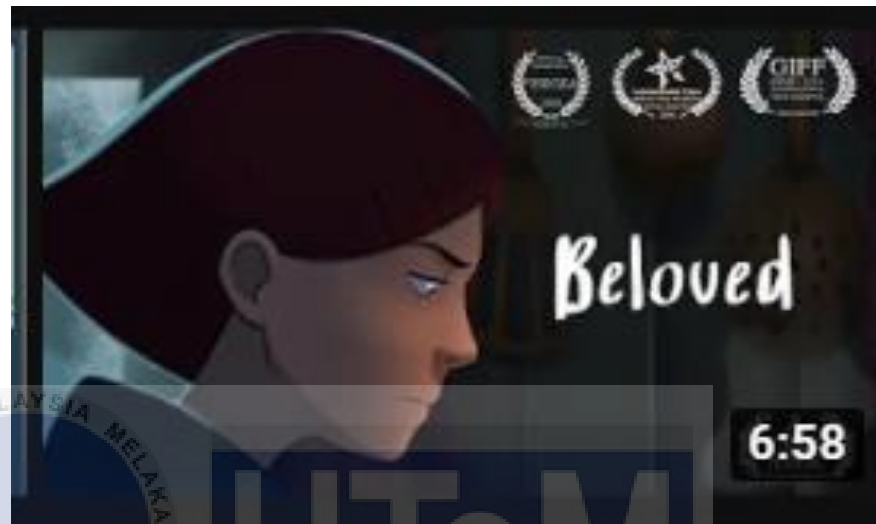


**Figure 2.2**Thumbnail of “Batik Girl - 2D animated short film” by The R&D Studio

This animation video talks about a young girl finds herself drawn into a magical world within a batik painting after her parent passed away. After the incident, she stay near beach with her grandmother. One day, she found a room with batik making tools. She fascinated by the batik production. Her grandmother teaches her on how to paint batik. One night, she dreams of entering magical batik

world. She went through an adventure. When she wake up, she hurriedly finish the batik painting. Happily lived with her grandmother.

(c) “Hjerterom” (Beloved) | 2D Animated Short Film | 2020” by Somnium Animation Studios



**Figure 2.3 Thumbnail of “Hjerterom” (Beloved) | 2D Animated Short Film | 2020” by Somnium Animation Studios**

It a story about a girl. At the beginning, the girl wanted to help a granny. So she went to her house. When the granny start to ask about what her plan for evening, she said she want to watch movie or something as her mum went out off town. She stayed on that granny house and celebrate Christmas together. The granny gifted a yellow scarf for her. She started to feel emotional and cry on granny’s arm.

### 2.3.1 Comparison of Existing System

Existing 2D animation on Tourette Syndrome	“Living with Tourette's syndrome - Story time animated” by STORY TIME	“Batik Girl - 2D animated short film” by The R&D Studio	“Hjerterom” (Beloved)   2D Animated Short Film   2020” by Somnium Animation Studios
<b>Target Audience</b>	Public	Public	Public
<b>Approach</b>	Storytelling	Storytelling	Storytelling
<b>Duration</b>	4 minutes 47 seconds	9 minutes 23 seconds	6 minutes 57 seconds
<b>Views and likes</b>	845 views 16 likes	412,702 views 32k likes	20,381 views 1.3k likes
<b>Date Published</b>	May 1, 2020	Nov 11, 2019	Jul 4, 2020
<b>Platform</b>	YouTube	YouTube	YouTube

Table 2.1 Comparison of existing systems

### 2.4 Project Methodology

2D animation is the use of two-dimensional objects and characters in video form as an artistic medium for storytelling and message delivery. It uses the width and height of still images in 2D space to create the illusion of movement. The animation process is the technique or method used to create unique 2D animation videos. Characters, backgrounds, and storyboards are typically included in the process of creating 2D animation videos.