COVID-19 AWARENESS THROUGH DIGITAL COMIC IN 2D ANIMATION VIDEO



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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JUDUL:	[COVID-19	AWARENESS	THROUGH	DIGITAL	COMIC	IN	2D
<u>ANIMATI</u>	ON VIDEO]						
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COVID-19 AWARENESS THROUGH DIGITAL COMIC IN 2D ANIMATION VIDEO

SITI NOR ATHIRAH BINTI ROSDAM



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 UNIVERSITI TEKNIKAL MALAYSIA MELAKA

DECLARATION

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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I hereby declare that I have read this project report and found this project report is sufficient in term of the scope and quality for the award of Bachelor of [Computer Science (Interactive Media)] with Honours.

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DEDICATION

This final project is dedicated especially to my family for their support and motivation that keep me moving forward to complete my final project. Besides, I would like to thank my friend for helping and giving moral support if I gave up.

I also would like to dedicate my biggest appreciation to my Ass. Prof. Ts. Dr. Hjh. Norasiken Bakar for her guidance and useful advice that helped to accomplish this final project.



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Thank you.

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ABSTRACT

As daily positive cases in Malaysia are growing rapidly, the project aims to develop digital comics that will help people become more aware of COVID-19 and evaluate the effectiveness of video-based digital comics. Adaptation in the digital age has led people to have an alternative approach to reading books through comics. The project still uses frames as separators between slots and is combined into one page to represent comic books. There are some simple 2D animations involved in each slot that will help viewers gain new knowledge on how to keep themselves from COVID-19. This digital comic is easy to read because it uses Malay as the language. The time it takes to complete this project is 22 weeks. The software used to produce this digital comic is Microsoft PowerPoint. To ensure this project is successful, two types of testing have been conducted which are alpha and beta testing. During the testing, there are several factors that need to be changed, including increasing the font size used and using more attractive animation techniques. In conclusion, this digital comic can enhance the effectiveness of comic readers. This digital comic can also be used by kindergarten teachers as a teaching material for students on ways to prevent the COVID-19 virus.



ABSTRAK

Disebabkan kes positif harian di Malaysia meningkat dengan pesat, projek ini bertujuan untuk mengembangkan komik digital yang dapat membantu orang ramai menjadi lebih peka terhadap COVID-19 dan menilai keberkesanan komik digital berasaskan video. Penyesuaian dalam era digital telah menyebabkan orang ramai mempunyai pendekatan alternatif dalam membaca buku melalui komik. Projek ini masih menggunakan bingkai sebagai pemisah antara slot dan digabungkan dalam satu halaman untuk melambangkan buku komik. Terdapat beberapa animasi 2D mudah yang terlibat dalam setiap slot yang akan membantu penonton untuk mendapatkan pengetahuan baru mengenai cara menjaga diri dari COVID-19. Komik digital ini senang dibaca kerana penggunaan bahasa Melayu sebagai bahasa penghantar. Tempoh masa yang diperlukan untuk menyiapkan projek ini adalah selama 22 minggu. Perisian yang diggunakan untuk menghasilkan komik digital ini adalah Microsoft PowerPoint. Bagi memastikan projek ini berjaya, dua jenis pengujian telah dijalankan iaitu ujian alfa dan beta. Semasa pengujian dijalankan, terdapat beberapa faktor yang perlu diubah, antaranya adalah meningkatkan saiz font yang digunakan dan menggunakan teknik animasi yang lebih menarik. Kesimpulannya, komik digital ini boleh meningkatkan keberkesanan parapembaca komik. Komik digital ini boleh juga diguna pakai oleh para guru tadika sebagai bahan mengajar kepada murid-murid terhadap cara-cara mencegah diri daripada dijangkiti virus COVID-19.

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LIST OF ABBREVIATIONS

2D - Two-dimensional

COVID-19 - Coronavirus Disease

SME - Subject Matter Expert

IT - Information Technology



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CHAPTER 1: INTRODUCTION

1.1 Project Background

The coronavirus disease or COVID-19 is a new virus that began in Wuhan, China in December 2019. Coronavirus is an illness brought about by SARS-CoV-2 that can trigger what specialists call a respiratory plot infection. It can influence your upper respiratory tract (sinuses, nose, and throat) or lower respiratory parcel (windpipe and lungs). It spreads a similar way different COVIDs do, fundamentally through individual to-individual contact. Infections range from gentle to fatal. SARS-CoV-2 is one of seven sorts of COVID, including the ones that cause serious infections like Middle East respiratory condition (MERS) and unexpected intense respiratory disorder (SARS). The different COVIDs cause the wide majority of the colds that influence us during the year yet are insane not a genuine danger for in any case sound individuals. Some of the symptoms faced by frequently discovered patients are fever, dry cough and fatigue. The virus is spread very fast because the virus moves breathing or touch drops.

Digital comics or also known as electronic comics are the latest way to read comics. The first ever comic was *The Adventures of Obadiah Oldbuck* that was produced in 1842 (Chandran D, 2015). As time goes by, different genres of comics have been produced. Most international film productions make comics a platform to convey 'Easter eggs' to readers so that they can follow the storyline. For example, Marvel is one of the most well-known companies that publishes films based on comics. Digital comic earnings have made it easier for Marvel fans because they no longer have to wait for comic books to be delivered to their homes. Readers can access the comic through Marvel's official website or download the 'Marvel Comic' application. In Asia, digital comics have gotten exceptionally famous because of readers generally looking through titles on their cell phones and the lower obstruction to make their own

comics. In certain nations, digital comics have refreshed the business or even made them where they didn't exist previously. Digital comics are very suitable to be read using a tablet because of their wide size and seem to be the same size as a regular comic book.

1.2 Problem Statement

The Government of Malaysia has established a standard operating procedure (SOP) to reduce the spread of COVID-19 cases. In addition, various other initiatives are used to remind people how important care is in preventing the spread of the COVID-19 virus. Among them are placing posters at public transportation places and requiring the wearing of face masks as well as a fine of RM10, 000 if not done so. But there are still other Malaysians who take it easy on the SOP set by the government. They did not seem to be afraid of the virus until there was a group who said it was a scam designed by the westerners. Residents have separated various false info without checking its validity. This has caused doubt among the population. Earlier this year, the first COVID-19 vaccine arrived in Malaysia and the government was pleased to provide the vaccine for free to all Malaysians. There are still others who do not want to receive the vaccine and have been called anti-vaccine groups. These people have spread false information related to vaccines and caused a handful of people to panic and do not want to receive vaccines. According to the Minister of Health official website, the total number of COVID-19 positive cases in Malaysia was 5,293 as of 20 June 2021. Malaysia's chief health minister has repeatedly reminded people to always do their own quarantine by sitting at home if there is no important business outside to reduce the spread of this epidemic unnoticed. If this continues, there is no way positive cases in Malaysia will increase to thousands. The virus is not expected to disappear completely in the next few years.

1.3 Objectives

The objectives of this project are as below:

 To develop a digital comic that can help kindergarten to be more sensitive to COVID-19.

- b) To enhance the user experience when reading digital comics through video.
- c) To evaluate the effectiveness of video based digital comics compared to old versions of comics.

1.4 Scope

The target user in this project is focused on kindergarten and it is also suitable for all. They can earn awareness campaigns about the COVID-19 in digital comics. This project is also suitable for people who want to try new ways to read digital comics as they can be easily accessed through YouTube because this project will be presented in a continuous video. Users can use their own smartphone, tablet or computer to read this digital comic. As this project is localized in Malaysia, this project will use Malay language to ensure that all Malaysian can understand and are able to read the digital comic.

1.5 Project Significance

As the digital comic focuses on the topic of awareness of COVID-19, ways to prevent the COVID-19 virus from spreading without realizing it will be shown in digital comics. This project will benefit everyone as they can learn knowledge through reading digital comics through video.

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1.6 Conclusion

In conclusion, this chapter briefly explained about the purpose and the objectives that will be carried out along the project. For the next chapter, methodology of the project will be discussed.

CHAPTER 2: LITERATURE REVIEW & PROJECT METHODOLOGY

2.1 Introduction

This chapter will discuss the findings and research of the related topic about 2D animation and digital comics. Besides, this chapter also will cover the project methodology to show the process of development and the requirements such as software and hardware in order to develop the digital comic.

2.2 Domain

In this part, the concept of visualization will be discussed which are the concept of digital comics, style of comics, definition and concept of 2D animation.

2.2.1 Concept of Digital Comic

Like print comics, digital comics are a wide medium, and albeit huge numbers of comic-known things from a look, it's difficult to make a bunch of highlights that apply to all things that can be viewed as a digital comic. The advanced idea of comics can arrive at a few unique parts of creation and utilization. For instance, many printed comics are currently made utilizing computerized programming. There are digital book forms of comics accessible, just as applications. Some digital comics are intentionally made to be perused in computerized designs, while others are variations from print distributions. A part of these comics utilizes computerized innovation expressly through hyperlinks, movement, or sounds, while others firmly look like printed comics yet have been distributed on advanced stages. Any of these highlights seemingly permits comics to be alluded to as digital, while a few viewpoints, for example, digital born comic might be nearer to the overall impression of what digital comics mean than others like have been made utilizing programming bundles.

2.2.2 Styles of Comics

Comic books began in the late 19th century. Since then, a wide collection of comic books has been produced and various comic delivery styles have been introduced. For example, many comic artists now use digital platforms to draw their comics because digital comics have more place in the hearts of comic readers in this age of information technology. Comic artists have used various types of art styles.

2.2.2.1 Franco-Belgian Comic

In 1908, the Franco-Belgian comics were first published through newspapers as "episodes" and became sarcastic materials addressed to peers and government bodies (UKEssays, 2018). Currently, speech bubbles are not yet in use because it is still in accordance with the traditional text comic format where the text is written under the image. People can get this comic book nowadays as a hardcover book which contains a compilation of stories with different genres. Among the famous characters through the Franco-Belgian comics is "The Smurfs". In Franco-Belgian comics, all the pages are arranged in neat tiers and usually are highly stylized drawings like exaggerated proportions, bug eyes and large nose. The gutters are white and evenly sized. The colors used are black and white or saturated colors with very shading. Speech bubbles, onomatopoeia and character never spill outside the frames.

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Figure 2-1 Example of Franco-Belgian Comics Style

2.2.2.2 Graphic Comic

Graphic novels are typically interpreted as a long comic story for mature people, distributed in hard or soft covers and sold in book shops, with pure scientific subjects and fine craftsmanship. Graphic novels are often not unique in distribution, but are responded to by various types of comics distributed in a subsequent manner. Although some materials are shipped mainly to the graphic novel market, bookstores and libraries do not make authentic adaptation, so graphic novel terms often fill no

genuine expressive reasons (Murray, 2017). Nowadays, graphic novels help children practice reading because they contain texts and images same as the comic strip style.



Figure 2-2 Example of Graphic Novel Comic's Style

UNIVERSITI TEKNIKAL MALAYSIA MELAKA 2.2.2.3 Superhero Comic

Superhero comics have existed for 80 years ago and the characters that appear are not superheroes who have superhuman powers. They began with ordinary characters such as Popeye (1929) and The Phantom (1933) (Staff, 2017). Comic fans and collectors divide the era of superhero comics into 4, Golden (1938-1950), Silver (1956-1970), Bronze (1970-1985) and Modern (1985-present). In 1938, Superman was introduced by DC as the first superhero character to wear a costume. Superhero comics are used as references to create great movies nowadays.