# PERJUANGAN TOK JANGGUT USING 2D ANIMATION



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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# "PERJUANGAN TOK JANGGUT" USING 2D ANIMATION

# WAN NUR ADIBAH BINTI WAN MOHD RADZI



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

# FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2021

#### **DECLARATION**

I hereby declare that this project report entitled

## PERJUANGAN TOK JANGGUT USING 2D ANIMATION

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 UNIVERSITITEKNIKAL MALAYSIA MELAKA

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#### **DEDICATION**

This final project is entirely dedicated to my loving parents, who have been my source of inspiration, given me strength when I was about to give up, and provided support and assistance whenever and wherever I needed it. In addition, I'd like to thank my supervisor, Prof Dr Hafiz bin Zakaria, for his unending support and guidance as this final project progresses. Dr Ulka Chandini Pendit, my evaluator, for her comments and guidance on this final year assignment. Finally, I'd want to thank all of my dear friends who were always willing to lend a helping hand and provide words of advice and support as I worked on my final year project.



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Not to forget the Universiti Teknikal Malaysia Melaka, particularly the Faculty of Information and Communication Technology, for providing me with the opportunity to study here.

Last but not least, I want to express my heartfelt gratitude and appreciation to my family for their prayers, support, and encouragement in helping me complete the project successfully. Not to mention all of my friends and supporters who have helped, supported, and contributed to the completion of this project. Without the assistance of the individuals stated above, I would face several challenges while completing this project.

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## **ABSTRACT**

The created project is related to 2D (2-Dimensional) animation. This animation project is the creation of a short storey about a leader named Perjuangan Tok Janggut. His full name is Haji Mat Hassan bin Munas, and he is a community warrior. The use of 2D animation as a learning tool in history is an innovative way to create an atmosphere that can capture students' attention. An animation can represent an idea, item, connection, scenario, or learning process. This approach offers several advantages in the learning process. Students can benefit from an easier learning experience when they use animation. Many students who study history have boring classes since there are so many facts that they must comprehend. Students may learn about the history of this Perjuangan Tok Janggut in a more fascinating and understandable way by using 2D animation. This animated video can help students learn more effectively about the history of this Perjuangan Tok Janggut.

#### **ABSTRAK**

Projek yang dibangunkan adalah berkaitan dengan animasi 2D (2-Dimensi). Projek animasi ini melibatkan penghasilan cerita pendek berunsurkan Perjuangan seorang pemimpin yang bernama Tok Janggut atau nama penuhnya Haji Mat Hassan bin Munas, seorang pejuang dalam kalangan masyarakat tempatan. Pelaksanaan animasi 2d sebagai alat pengajaran dalam mempelajari sejarah memangnya merupakan inovasi untuk mewujudkan persekitaran yang dapat meningkatkan minat pelajar. Animasi mampu memvisualisasikan sebuah konsep, objek, hubungan, keadaan dan proses pembelajaran. Kaedah ini banyak memberi maanfat dalam proses pembelajaran. Belajar menggunkan animasi dapat memberikan pengalaman belajar dengan mudah kepada pelajar. Ramai pelajar berpendapat bahawa pelajaran sejarah adalah pelajaran yang membosankan kerana fakta yang banyak dan peristiwa yang perlu pelajar fahami. Melalui animasi 2d sejarah Perjuangan Tok Janggut ini dapat disampaikan dengan lebih menarik dan mudah untuk difahami oleh pelajar. Video animasi ini dapat membantu pelajar dalam memahami sejarah perjuangan tok janggut ini dengan lebih efektif.

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#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Introduction

The demand for jobs in the twenty-first century would be based on quality rather than quantity. As a result, society does not ignore the government's efforts to develop these high-quality human capitals. The education sector is one of the key pillars of understanding this situation to generate quality manpower. Various types of rewards, such as research, efforts, and initiatives, are used to review the country's educational system so that it is in line with our country's atmosphere in terms of providing better human resources, as well as improvements and technological advances that are more advanced today.

Our technology is changing now, and the effects of modernization are said to be changing our world faster than we can expect, not least in the field of education, which is changing along with it. Education in Malaysia is rapidly expanding because of the information technology revolution, and it is getting closer to the national target of Vision 2020. In this regard, the advancement of information technology has now become one of the main drivers behind the paradigm shift toward developing Science and Technology in order to create human resources and a capable society that is successful in the field of technology in keeping with the State's mission and vision (Norjihan, 2005).

Various reforms were implemented to improve the standard and quantity of schooling. Malaysian education is constantly going to improve and grow the capacity of its human capital to be better. As a result, to raise Education quality requires a range of advancements in curriculum growth, learning technology, and the creation of educational facilities and infrastructure.

Planning the lesson is an important move that can decide whether a learning process succeeds or fails later. It is necessary to pay attention to two important elements of learning while preparing learning, namely learning approaches, and learning media that would be used to support students' awareness of the subject matter. The two things are related. The use of one learning method can influence the form of teaching medium used in conjunction with the chosen learning method.

Multimedia are various stimulants and resources that are used to increase students' ability to learn. The choice of learning media is not only based on the learning process, but also on the goals of teaching, the styles of activities and answers that are required to be learned by students after teaching takes place. The use of appropriate media is intended to stimulate students' emotions, feelings, attention, and desires, allowing the learning process to function smoothly, accurately, efficiently, and pleasantly, and to achieve the desired learning objectives.

#### 1.2 Problem statement

According to my knowledge as a teacher who teaches Form 1 and Form 2 History subjects, the average student said that he had difficulty remembering facts in History subjects because there were too many facts to recall. This allows students to lose interest in the topic of history because it is boring, difficult to understand, and has nothing to do with their lives directly, resulting in passive teaching and learning of history. (Rohani, 2012). History is a required subject for all students in the secondary level. History is not new to our society and our country has its own history. The cultural aspects that have been introduced into the subject of History are intended to help students understand the significance of history.

Students regard the learning material in the History subject as historical since it includes historical facts or accidents. Furthermore, students find the history of the Malaysian Proclamation Incident tough, despite having previously researched it. History is a boring matter, according to the students since it only includes theoretical sentences with a few supporting pictures or explanations. The teacher who taught these subjects confirmed that students find it impossible to pursue the history learning method because they were too slow to read the ideas and events of their history textbooks.

The methods of learning used in history are consistent. Teachers' presentations, student memorization of content, and focusing on questions from student handbooks are all common learning practises in history classes. Students claimed that they were too tired to remember events, days, events that happened, and the characters involved. There are so many ideas and materials to memorise and recall, which decreases their participation in History classes. The next effect faced by students because of their poor reading interest in the subject being learned

is difficulty in creating summaries, small notes, and mind maps. Even though literacy is one of the most important aspects of history lessons.

Moreover, differences in student learning patterns mean that not all students can learn only by writing to memorise. In the fact that there are numerous learning methods teachers, history learning remains one of the most common. The learning approach is critical such that the learning experience is enjoyable and does not overwork the students, and students can immediately understand. "I will see and emphasize to teachers to teach this subject more interestingly especially for the millennial generation by diversifying digital education," (Maznah, 2019)

Learning was limited using learning materials, tools, and media. Students' learning opportunities are limited to printed books and the knowledge of their teachers. When their research opportunities run out, they turn to the internet for more knowledge on the subject they've read. Learning media and materials used in History education are still in short supply. Other types of supportive media are rarely used by teachers. This situation is rather unfavourable because it would result in students becoming frustrated and bored, making the learning experience futile and unappealing for students who simply read books. In particular, learning by reading text only produces 10% memory retention, while learning by seeing and hearing produces approximately 50% retention, suggesting that learning that requires many senses would be able to increase the efficacy of human learning (Kustiono, 2010: 13). As a result, learning that requires several senses exhibited by humans will help understanding of the information being learned.

Audio, film, video, animation, illustration, simulation, and digital technology are all examples of media that can be used in education. Similarly, learning media is needed to promote history learning. Students should be able to learn about the events surrounding Malaysia's independence more quickly and enjoyably if they use learning animation. The instructional animation is a type of audio-visual media that is superior to other forms of animation because it combines audio and visual media. Furthermore, the benefit of video animation is that it can be used by teachers and students at any time and from any place. Video animation can be used repeatedly digitally and for a long time in the learning process if the quality of the animation is still important to the information being loaded.

# 1.3 Objective

There is the following objective of "Perjuangan Tok Janggut" using 2D animation are:

- i. To study how 2D animation is used to tech history subject at schools.
- ii. To develop a local 2D animation to tech history based on SMK Form 3 syllabus.
- iii. To evaluate the acceptance of the 2D animation.

# 1.4 Scope

This scope will explain the user who will be engaged in this system and the function that will be involved in this system. The main scopes of the system:

Target User: Student form 3

# 1.5 Project Significance

The following is the projected outcome of the proposed project development at the end of the project:

- i. The user will be able to recall information regarding history more easily.
- ii. The results of this research and development of students can increase student's interest and motivation to learn about history subject.

#### 1.6 Conclusion

In the existence of this application and an ever use of technology, it is hoped that this initiative will assist student in learning and gaining skills. I hope that this 2D animation will assist students in learning about history of Malaysian and in raising awareness of History of Malaysian for future generations.

#### CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY

#### 2.1 Introduction

This chapter discusses earlier or related work in 2D animation for "Perjuangan Tok Janggut." The process of reading, assessing, and analysing the extant literature relevant to the specified topic of a project in order to present a need for new research is referred to as a literature review. Research was conducted for this project literature review in order to comprehend and gain an overview of the existing project and associated technologies.



Figure 2.1 Animation

## i. Animation

The term "animation" comes from the Latin word Anima, which meaning "to give soul, life, intellect, and spirit." The term "animation" refers to a type of display that mixes text, pictures, and sound in a moving process (Munir, 2013). Animation is a technique for creating audio and visual works that rely on time and visuals.

Stop-motion animation, traditional animation, digital animation, 2D animation, and 3D animation are the different forms of animation depending on the production technique.

To begin, stop-motion animation (stop motion) is a technique used to produce objects that are physically controlled to appear to move on their own. Second, classical animation is the most used method for creating animation. Traditional animation is created by drawing each action one by one.

Third, computer animation, which is performed entirely on a computer. All is performed on the screen, from designing the characters to controlling the action of the "actor" and the camera, casting the votes, and creating the special effects. Fourth, 2D animation (2 Dimensions) is often referred to as cartoon animations, where the object being animated has a length and width. Fifth, 3D animation (3 Dimensions), which has benefited from technical and computer advancements in its production. The object is called three dimensional since it has depth and space.

The benefit of animation media is that it combines many media components such as audio, text, video, images, graphics, and sound that can be presented together to match student learning modalities.

"Animation is used for everything online (advertising, entertainment), even if you don't realize it initially," says Scott Claus, 2D Animation Mentor at CG Spectrum.

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# ii. HistoryERSITI TEKNIKAL MALAYSIA MELAKA

A historical analysis of human life and history. The next generation will quantify the causes and effects of an accident using stories or pictures from the past (Kompas.com, 2019). History lessons are social sciences that require reading habits and an interest in history. History topics have a strategic significance in the development of a dignified nation's character and culture, as well as in the formation of Malaysians who have a sense of nationalism and love of homeland. One of the goals of implementing history education is to instil a sense of patriotism in pupils. It is hoped that by acknowledging and explaining past struggles, one can have a better understanding of the significance of past struggles.

According to Wasino (2005: 5), the goals of learning history in schools include, among other things, students gaining the ability to think historically and understand history,

raising awareness of the importance of time as a process of the past, present, and future, and training learners' critical thinking skills to correctly understand historical facts based on scientific approaches and scientific methods (history). The goal of studying History is for students to be able to think historically in order to appreciate History, to raise awareness of the importance of time as a continuum of the past, present, and future, to train learners' critical thinking skills in order to accurately understand the reality of History, and to foster an interest and appreciation of the relics of History as proof of civilisation. One of the goals of implementing History learning is to create a sense of patriotism in pupils. It is hoped that by knowing and explaining past challenges, we will be able to develop an appreciation of the significance of resistance in the past. Capability to understand In today's classrooms, students are expected to not only understand the content, but also to interpret, reason, and recreate it.



Figure 2.2 Tok Janggut

## iii. Tok Janggut

During the Kelantan insurrection, Haji Hassan bin Munas (1853–25 June 1915) was a Malay fighter in Kelantan, Malaysia. He battled alongside the fearsome warrior Adib Burhan. Tok Janggut ('old man with a beard' in Malay) was the moniker given to Haji Mohd Hassan Bin Munas due of his lengthy beard that extended almost to his chest. Tok Janggut was born in 1853 in Kampung Jeram, Pasir Puteh, Kelantan. He obtained his early schooling (pendidikan pondok) in Kelantan and Mecca and was a master of silat, a Malaysian martial art. Panglima Munas, his father, was a commander in the Kelantan palace.

# 2.3 Existing System

Related products relate to a previously existing and utilised system. This is an example of a system:

# Buku Sejarah Tingkatan 3 – Textbook



Figure 2.3 Textbook Sejarah Form 3

Textbooks are the most important resource in the teaching and learning process where teachers apply effective teaching techniques to achieve learning objectives in the classroom. "A book that contains detailed information about a subject for those who are studying that subject," according to the Cambridge International Dictionary of English. Textbooks, according to Dent (1955), are crucial learning instruments that are difficult to replace with other materials. In a press statement, Dr. Mohd Puad (2009) stated that school textbooks are created utilising diverse pedagogical approaches of teaching and learning to accomplish the goals of the National Education Philosophy, which is to holistically and integratedly shape individual capabilities.

## **Kahoot – Game Based Learning**



Figure 2.4 Kahoot

Conventional testing tools that use pen and paper have long been practiced to test students' understanding and measurement of a subject. According to Ramlah, Shahabuddin and Mahani (2003), the use of conventional testing tools that help students think critically and students are too passive compilation of questions. Furthermore, students will use a long time to read questions that are too long for the time to answer all the questions becomes short time which requires students Due to that, students are unable to give focus and attention to the questions and will fail to answer the questions correctly (Azalina, 2013). According to a study conducted by Deterding (2011), one of the acceptable ways utilised by teachers as a testing tool in the twenty-first century is game-based learning. The Kahoot app, which includes game characteristics like as scoring, incentives, and interactions, promotes more active and enjoyable learning. The use of a combination of multimedia elements available in the Kahoot application enables cognitive theory-based learning to be deployed and broadened its use in History teaching and learning. This is due to the fact that students can pick between two types of quizzes on the Kahoot app: Classic mode (individual competition) and Team mode (group competition) (competition between teams). Each accurate response will be assigned a score, and the score and best player will be displayed at the end of the game. As a result, this study was carried out to investigate the impact of employing the Kahoot application as one of the methods for measuring student achievement in the subject of History.