





SCI // CC #07 - 2023 ALL PROJECTS ARE A PRODUCT OF UTB



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#### **OPENING REMARKS**

Alhamdulillah. As we open the pages of 'The Portfolio 2023: An Insight to Creative Computing Projects,' we embark on a journey of creativity, innovation, and accomplishment.

In these past two years, the world has faced challenges that have disrupted our lives and tested our resolve. The global pandemic altered the way we teach, learn, and work, affecting every facet of society. Yet, within these pages, you will find a testament to our resilience and adaptability.

'The Portfolio 2023' represents the Seventh Edition of this prestigious magazine, showcasing the extraordinary talents of our Seventh Graduating Intake in Creative Computing. Among the 17 remarkable projects, you will discover a diverse range of creativity, from mesmerizing 3D animations that breathe life into digital landscapes to immersive game developments that transport us to new dimensions. Virtual reality and augmented reality projects blur the lines between reality and imagination, while meticulous 3D rigging brings characters and objects to vivid existence. Additionally, research studies illuminate the path forward in our ever-evolving field.

These projects are not merely showcases of individual brilliance; they are a reflection of the transformative power of technology and creativity within the Creative Economy. As we explore the pages of this magazine, we recognize that our industry is at a pivotal moment, reshaped by the intersection of art and technology.

While AI-generated art may not be featured within these pages, it looms large over our industry, challenging conventional notions of creativity and artistic expression. The evolving landscape offers both new opportunities and new questions for the creative minds of tomorrow. Instead of fearing or shying away from this change, we should embrace it as an opportunity to harness AI's capabilities and make them work for us. Let us seize the opportunity to collaborate with technology, creating a harmonious fusion of human creativity and artificial intelligence.

Class of 2023, within these pages, you have etched your mark on the everevolving canvas of creativity and technology. May your projects continue to inspire, your creativity continue to flourish, and your contributions continue to shape the Creative Economy. Congratulations, and thank you for sharing your remarkable journey with us.



Programme Leader Creative Computing School of Computing & Informatics Universiti Teknologi Brunei

#### FOREWORD

I am delighted to welcome you to the seventh edition of 'The Portfolio: An Insight To Creative Computing Projects'. As with any other editions being released before, this magazine acts as a platform for the graduates within the Creative Computing Programme Area under School of Computing & Informatics (SCI), Universiti Teknologi Brunei (UTB), to showcase their remarkable talent through their final year projects and in hopes to be discovered.

Each of the projects presented here has been crafted with distinct visions, skills and dedicated efforts, ranging from 3D Animations, Game Development, Extended Reality, 3D Rigging, to Research Studies, with the goal of making a lasting impression on its audience.

It was mentioned in the Digital Economy Forum hosted by the ASEAN and APEC Business Advisory Councils in collaboration with the Ministry of Finance and Economy (MOFE) back in August 2023, that Bruneians are among the active contributors of technology, and not solely as the consumer. Thus, in turn these projects aim to delve within the creative industry in contribution to such vision.



HAJI NORASLAM BIN HAJI OTHMAN BSc. (Hons) in Creative Multimedia Creative Computing School of Computing & Informatics Universiti Teknologi Brunei





The 'new normal' brought the whole world into a new era, where we can see a lot of improvements especially in adapting new and existing technologies. The rise of digital transformation forces everyone to readjust our ways of living, which also affected our ways of learning. The surge of e-learning platforms benefited both students and educators as it was able to make teaching and learning more convenient and efficient, as well as for any upskilling trainings.

The Creative Industry plays a crucial role in realizing the Wawasan Brunei 2035 where the contribution can be seen as part of diversifying the national economy. UTB on the other hand continues to contribute to this goal by producing competent graduates who are proficient in various fields. Among the achievements, UTB is being ranked as one of the top 20 universities in Southeast Asia by the Quacquarelli Symonds (QS) World University Ranking 2024 and it maintains to foster collaborative works and partnerships with varying stakeholders from both local and overseas, providing more opportunities for the students and the university.



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## 3D ANIMATION

THERE IS A

STRANGER IN MY

HOME

MOHAMMAD ALIFF

BIN ZAMRI

TEMAN

ANIMATION)

ABD HAKAMIL ADLI BIN HJ ABD HALIM



A HOMEMADE

MEAL

AK HASRA MUHAMMED

HAZIM BIN PG HAJI

HASSIM



HORROR SHORT

FILM - POSSESSION



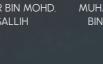


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ABANDONMENT **3D ANIMATION** 

MUHAMMAD IZZAT **BIN HAJI JOHARI** 







AWANG BUDIMAN

(3D SHORT

MOHAMMAD

NADHIR BIN HJ MOHAMED HUSAINI

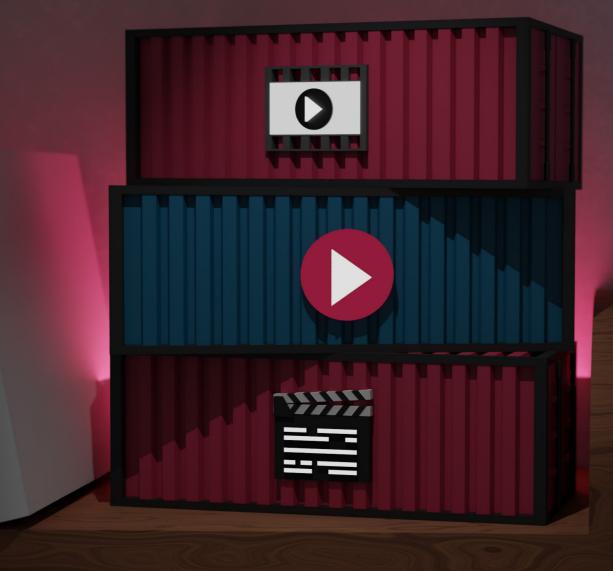


BRUNEIAN FOLKLORE - 3D ANIMATION SHORT (RELIGIOUS CONCEPT ON 3D

**BIN ROSLAN** 

- NAKHODA MANIS (3D ANIMATION STORY)

MOHAMMED ALIFF





#### AZHAR BIN MOHD. SALLIH

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#### **ABOUT ME**

I have always liked to look at pretty things. I appreciate the amount of effort and hard work people put into their work. I want to be able to

create works that could inspire people, just as others have inspired me.



#### PET ABANDONMENT



#### **PROJECT SYNOPSIS**

This project aims to raise the public's awareness on the problems of pet abandonment. Researching on proper camera techniques used in films and applying them appropriately within the animation helps to heighten the narrative. The story unfolds the journey of a cat abandoned in the forest, encountering its hardships while anxiously awaiting for its owner's return.

#### **PROJECT INSPIRATIONS**

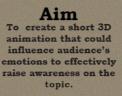
This project was inspired by a YouTube video. It was a real story about an abandoned cat in the mountain. People have tried to catch it but it always manages to escape, and it always returns to the exact same spot after. It had so much faith in its owner that it waited for around 3 months, even when winter was coming. It's unfair how it's been treated when it loved the owner so much, so I want people to love their pets as much as their pets love them through this awareness video.

#### Azhar bin Mohd. Sallih B20190126

#### PET ABANDONMENT 3D ANIMATION

#### **Overview**

Pet abandonment or pet dumping is a common issue. Abandoned pets are usually left in the wild, on the streets and even on other people's properties. Some owners think that their pets could survive on their own or that people would readily pick them up. In reality it puts the animals at risk as they cannot properly take care of them. They are in danger of starvation, thirst, diseases and other animals among many other things.



Target Audience Pet Owners & General Public

Tools

#### Problem Statement

Camerawork plays a major role in films. Some films do not take advantage of or fail to use camerawork to improve its storytelling. There is also a lack of awareness and knowledge on animal

and knowledge on animal abandonment among the public.

#### Audience Reception

The animation and visuals are well received. The sound design needs improvement. The audience understood the message the animation is

trying to convey.

VERSITI TEKNOLOGI BI

#### Objectives

Create a 3D animation and create same scenes with multiple camerawork. Present to audience and identify emotions and preferences for each scene.

#### Conclusion

Emotions shown in a shot is more preferred rather than the information present in the scene.

oblender<sup>\*</sup>



#### MUHAMMAD IZZAT BIN HAJI JOHARI BSc. (Hons) in Creative Multimedia

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#### ABOUT ME

Izzat Johari (or people know me as Ejat Jo), is a photographer based in Brunei Darussalam. Work as a part-time photographer for weddings and corporate events. Doing portrait photography is a hobby and a passion of mine and it also helps me refine my photography skills. Lately, animation and digital drawing became an interest for me, and I started to learn more in that field. Honestly the creative field is always fun and interesting.



3D ANIMATION HORROR SHORT FILM - POSSESSION



#### **PROJECT SYNOPSIS**

A short 3D animation based from Brunei's ghost story book, starred by Johan, the main character that has the habit of taking other's belongings and says that the item belongs to him. One day the item that he took was actually an item that the ghost resides in it.

#### **PROJECT INSPIRATIONS**

Inspired from my assignment and Computing Group Project, which focused on doing animation in 2D that time; I wanted to challenge myself into doing 3D animation. Hence, the creation of 3D short animation called Possession. It was also inspired by the Bruneian author, Rozan Yunus, from his book "Scary Dreams", and led me to the idea of my Final Year Project.





#### MOHAMMAD ALIFF BIN ZAMRI

BSc. (Hons) in Creative Multimedia

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#### **ABOUT ME**

From a young age, it never really crossed my mind to be a creative student. That soon changed when I started to spend my time on

doodling on some random characters and created stories around them. That is when I found out that I wanted to be a 3D Animator, and it became my life's goal. When I started, I had zero knowledge on the creative industry, and I always felt like I am underperforming than the rest of colleagues. However, that did not stop me from trying to pursue what I really want to be because overtime I know I will improve and get better with my skills. And so, I can officially at this point in my life, call myself a Creative Media Designer.



#### THERE IS A STRANGER IN MY HOME



#### **PROJECT SYNOPSIS**

This is a story about a old man named George living his peaceful life but not anymore. A terrifying unknown presence is invading his house and this chain of event is going to change his whole life. Will George get through this horrifying ordeal or will he succumb to his madness?

#### **PROJECT INSPIRATIONS**

My project is actually a tribute to my grandfather who is also diagnosed with dementia. From my point of view, he is what I consider an angel, he is both an influence to me and one of the best people I have met in this world. When I look at my grandfather, he is usually in distress whenever he is trying to remember us, but I know he loves everyone in the family equally. He always tries to be cheerful and happy even though he has a hard time remembering us. He always tries to pray during his quiet time about the person he could not remember and those who is close to him. Part of me wish that I should spend more time with him, but I am always shy to begin with; nonetheless I am slowly trying to get more confident overtime. As time goes by, I started to understand a bit on how dementia works and do a bit more research around it to portray the story around dementia carefully. And I have learnt that even if they do not remember us, the feeling of us being around him made a difference to his life. And I hope he is smiling up there.

## THERE IS A STRANGER IN MY HOUSE APSYCHOLOGICAL HORROR STORY

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OVERVIEW

Psychological horror has been around for awhile.

They usually focuses on a certain condition of a

person that affects in either their life or other life

And the story usually revolve around on how the

protagonist handle the situation and we are able to

perceive their condition in a horrifying view showing

how serious the condition is. Personally i have not

to showcase it to people of Brunei.

seen Bruneian done this genre in awhile i would like

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#### OBJECTIVE

- To showcase a 3D Animated Psychological Horror story to the audience of Brunei. The state • of mind of a person are not to be underestimate as they can leave a huge impact especially the one
- affected. As we know this state of mind usually represent
- fear and best way to present this is through horro With engaging narrative and visual we can leave •
  - quite an impression to the viewer

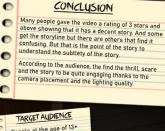
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#### PROBLEM STATEMENT 0

- There is barely any psychological horror related story in Brunei despite Bruneian like sharing some 0 horror story with other people. Usually when it com to mental health condition people usually approach it in a positive manner but usually it does not end like
- that. Before we can even reach such a outcome we 0 need to understand what they are going through first
- and that is what i intend to present in the video 0



People at the age of 13+ Horror Ethusiast udents

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#### FEEDBACK FROM THE AUDIENCE

- "It was terrifying, delivered well. It really showcases what dementia looks like to people showcases what dementia looks use to people who don't experience it; the unknown presence who is just there to help you, but you have no recollection of. I had a few guesses on type of disease/condition this was (dementia, PTSD) so it kept me on the edge of my seat lot
- 0

  - Rating : 4/5 ★

SOFTWARE USED Ps Pr  $\overline{\mathbf{0}}$ 

Mohammad Aliff Bin Zamri **Creative Multimedia** B20190301



#### AK HASRA MUHAMMED HAZIM BIN PG HAJI HASSIM

BSc. (Hons) in Creative Multimedia

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#### ABOUT ME

I started my media experience since 2015 which began my love of media related works from photography and videography to digital

graphic design and animation. The experiences I've gone through this journey has helped me shaped myself to be the person who I am today.



#### A HOMEMADE MEAL



#### **PROJECT SYNOPSIS**

This is a 3D animated short story about Jack, a 20 year-old man who lives with his father Johnathan. One day Jack arrives home to find his father who was still out. After living on junk food for a while now, Jack decides to cook a homemade meal for his father. Being an amateur cook, he looks up a few simple and easy recipes online which helps him into making a homemade meal.

#### **PROJECT INSPIRATIONS**

I wanted to make an animation video that influences the general public, and specifically I wanted to convince the people who would usually eat takeouts to try cooking their own meals with the use of easy to learn recipes that could be found online. The project was inspired from cooking tutorials on YouTube and animations from Studio Ghibli.



As of recent times, the consumption of fast food has been increased significantly due to the convinience, costs and choices of food menu. People, especially those who were busy with their working lives such as college students to office workers tend to end up feeling very unhealthy. At an age where the internet has become very accessible to almost anyone it is a good way to convey this message through a light hearted story which promotes a positive impact towards friends and families.

#### Problem Statement

Software used

Results

There is a lack of a 3D animation story regarding this topic in a light hearted way.

#### fims & Objectives

To Create a 3D animated story that influences people to cook after watching the video. Expected reaction would be at least 10% of the people would affectted There were 40% number of respondents who were influenced to cook after watching the video which os 30% more than the expected outcome

#### SCREENSHOT



Ak Hasra Muhammed Hazim Bin Pg Haji Hassim B20190342 Bachelor of Science(Hons) in Creative Multimedia



#### MOHAMMED ALIFF BIN ROSLAN

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#### **ABOUT ME**

My journey to creative media started when I was first exposed to animation especially 3D. The thought of creating your own 3D model and bringing it to life fascinates me, to the point of learning it more in depth. The lessons I have

learned and the mistakes I have made did not lessen my motivation but shaped me to what I am now, an aspiring animator looking forward to what the future holds.



Bruneian Folklore - **NAKHODA MANIS** (3D Animation Story)

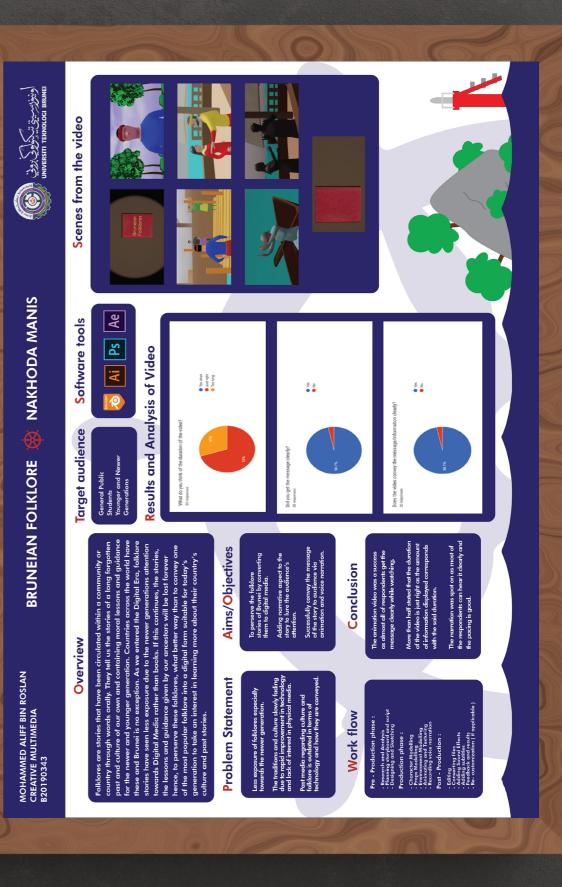


#### **PROJECT SYNOPSIS**

Nakhoda Manis is one of the most popular Bruneian folklores. It is a story about a young boy, Si Manis, who had an immense desire to travel outside the country and Dang Ambun, a loving and doting mother to Si Manis. The story encompasses a moral virtue of being filial to one's parents (acknowledging their love of them) and the consequences of unfilial piety (being cruel to parents) as shown when the story progresses from beginning to the end.

#### **PROJECT INSPIRATIONS**

This project was inspired by the lack of digital media for Bruneian folklores and stories. Most can be found and learned through physical media such as books, journals and oral tradition. Today, technology has advanced tremendously as more people are connected digitally through social media. I decided to re-introduce our own Bruneian folklore stories by digitally converting one of the popular Bruneian folklores to a 3D animation story which can be viewed through the internet. This will lead to an increase in exposure to others to learn more about Brunei.





#### ABD HAKAMIL ADLI BIN HJ ABD HALIM BSc. (Hons) in Creative Multimedia

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#### ABOUT ME

Since my high school days, I have been passionately interested in the creative industry and have always been eager to expand my understanding of it. I aim to gain knowledge

and develop skills that will enable me to excel in the creative domain, furthering my career ambitions in this field.



**TEMAN** 3D Animation short (Religious concept on 3D animation)

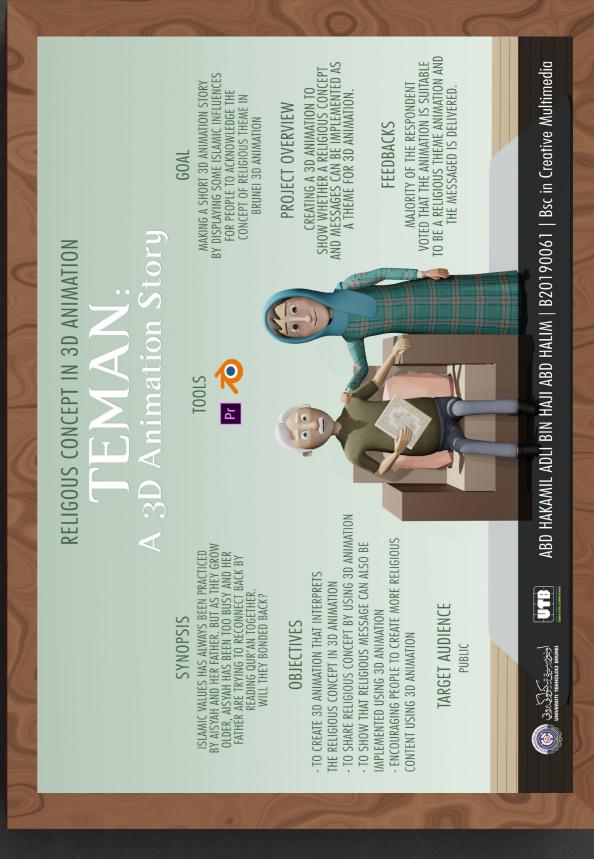


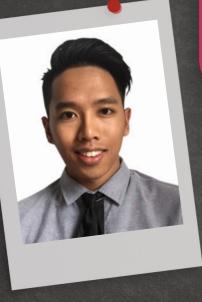
#### **PROJECT SYNOPSIS**

Aisyah and her father have always been close with each other. Reading Al-Quran together had been one of the ways to strengthen their bond and create memories. As Aisyah got older, she begins to be occupied with work and her father noticed that his daughter was slowly drifting away from him. He decided to approach this matter by reconnecting with Aisyah on the things that they used to love doing together and reminded her that in Islam, there are also ways that can help us in this life and the hereafter.

#### **PROJECT INSPIRATIONS**

Filming and videography has always been an interest of mine, but I wouldn't have imagined making a short film in the form of animation. The idea of this project has been long kept over the years, and I'm very fortunate to express and initiate the project to be a product for my Final Year Project. The project aims to promote Islamic values in the modern world of technology by creating an animation that incorporates Islamic education, thereby expanding its reach to inspire and influence a broader audience about the beauty of Islam.





#### MOHAMMAD NADHIR BIN HJ MOHAMED HUSAINI

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#### ABOUT ME

I'm a vibrant, versatile, lazy yet hardworking person that breathes and lives with the passion of anything related to art & creative expression.

But still, it's a long journey for me, until I find the right aesthetic and signature that truly reflects my soul as a creative person.



#### (3D short animation)

#### **PROJECT SYNOPSIS**

The Creative Industry in Brunei has shown promising growth over the years, alongside the performance of our local sport industry. For this project, the focus is to bring new life to the notorious sport icon of Awang Budiman in 3D.

#### **PROJECT INSPIRATIONS**

Very much inspired from the growth of the popularity of the 3D creative community amongst the fashion industry opting for an improvement in prop's visual aesthetic. Which then made me wonder, *'bishai jua ah kalau ku buat cemani untuk Brunei. Tapi apa?*', and that led me to this project.

## BUDIMAN 3D SHORT ANIMATION

AWAN

ROBLEM STATEMENT unei's sport athelet arformance is yet to be amazin ut mediocre. The only victoriou oment Brunei had ever recorde as back when Brunei hosted th and biennial event, Sea game 99. Therefore, bringing up th vamp Awang Budiman to lif vamp Awang Budiman to lif ould help summoning the inne sirit, morale and enthusiasm

BJECTIV

## DFTWARE TOOLS



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RGET

نيفرسيتي تيكنولوكي بروني 🛞 UNIVERSITI TEKNOLOGI BRUN

dOHAMMAD NADHIR BIN HAJI MOHAMED HUSAINI 320190297 - BS (HONS) CREATIVE MULTIMEDIA

## **GAME DEVELOPMENT**













VIRTUAL CAR

LANGUAGE LEARNING GAME

DRIVING TEST

JAPAR

SRIZULIAN ANAK

CHEREEN TAN JIA

NUFAIL BIN HAJI

MUHAMMAD NURI



#### CHEREEN TAN JIA EN

BSc. (Hons) in Creative Multimedia

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#### ABOUT ME

I have always had an interest in the creative industry because they capture my attention, and I sometimes would wonder how did

they do that? As I slowly dig in, I was mesmerized by the development process and my eagerness to learn more about the creative domain started to grow. I enjoyed learning new things and I am still in the journey of improving my skills.



#### LANGUAGE LEARNING GAME

#### **PROJECT SYNOPSIS**

This project aims to develop a language learning game prototype to enhance the user experience in learning languages through the game mechanism. A brief introduction to the project - A computer game that takes place in a supermarket where user learns the name of the object in normal Chinese Language, as well as how the words are pronounced.

#### **PROJECT INSPIRATIONS**

For my project, I got inspired by a Japanese language learning game called "Influent". Influent is an open world game where the user can roam around and find the Japanese names for everyday objects, as well as hear the native audio for each word. I think this kind of concept is cool and so I wanted to apply a similar concept to my project in introducing Chinese Language for everyone to learn.

# -ANGUAGE LEARNING GAME

PROJECT OVERVIEW: A computer game that takes | in a supermarket where user | the name of the object specif in Chinese Language.

**OBJECTIVES:** 

2

To enhar

TARGET AUDIENCE: Those who is interest in learning a second language.

AIM: To create a language learning ga that help user to learn Chinese Language in fun and simple way

#### retention of a user when learning a ne vocabulary • To investigate the impact of learning languages through the use of gamifica

GAME FEATURES: - Scenario Basis - Audio Provided

When traditional learning methods are used repeatedly for a long period of time, learners tend to slack off , thus, making them lost focus and motivation to learn.

TOOLS USED:



Chereen Tan Jia En B20190304 Bsc (Hons) in Creative Multime





#### SRIZULIAN ANAK JAPAR BSc. (Hons) in Digital Media

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#### ABOUT ME

I am a passionate university student specializing in graphic design and game development. With a keen eye for aesthetics and a drive for creativity, they constantly push the boundaries

of visual storytelling and interactive experiences. Their dedication and pursuit of excellence inspire others in the field, as they aim to make a lasting impact in the world of visual arts and gaming.



#### **PROJECT SYNOPSIS**

For my Final Year Project, I am developing a driving simulation game using a personal computer and steering wheel controllers. The objective is to provide users with a realistic driving experience and potentially aid them in preparing for driving tests. Additionally, I aim to assess the effectiveness of the game or simulation as a tool for enhancing users' driving skills.

#### **PROJECT INSPIRATIONS**

Recognizing that some of my friends primarily drive automatic cars and struggle with operating manual transmissions after extended periods of not using them, I conceived a solution to assist people like them in safely relearning the skills necessary for driving manual transmission cars without risking damage to their own vehicles.





#### MUHAMMAD NURI NUFAIL BIN **HAJI NOHI** BSc. (Hons) in Creative Multimedia

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#### **ABOUT ME**

Although I am new in the creative field, I am eager to improve and learn more skills that can help me grow creatively. Besides that,

throughout my studies, I've become more interested in game development, and I hope that one day I will be able to develop and release a game that people will enjoy playing.



#### LANGUAGE LEARNING GAME



#### **PROJECT SYNOPSIS**

This project is about a language learning game set in a 3D world modeled after a supermarket where players are able to explore the supermarket learn the names of products in different languages.

#### **PROJECT INSPIRATIONS**

This project is inspired by Shashingo: Learn Japanese with Photography, which is a Japanese Language learning game where players can take photos of objects in a 3D world and learn the name of those objects in Japanese Language. After watching the trailer of that game, I got inspired to make something similar.

## 👌 Unity 💫 Ps -eature Software Used Target User ultiple languag Audio Support vords are pronc LANGUAGE LEARNING GAME Jame Muhammad Nuri Nufail bin Haji Nohi Creative Multimedia B20190172

<sup>D</sup>roblem

jo O

### VIRTUAL REALITY



360 LIVE VR TOURISM APP

DISTRACTIONS WHILE DRIVING

VR 3D ANIMATION:

DAYANGKU NUR AQILAH SYAKIRAH MC BINTI PENGIRAN MUIZ ZULKIFLI AW

MOHAMMAD MUIZZUDDIN BIN AWANG IDRIS





#### DAYANGKU NUR AQILAH SYAKIRAH **BINTI PENGIRAN ZULKIFLI**

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#### **ABOUT ME**

I am a passionate 3D generalist, since 2016, with a bit of a knack on game, AR and VR development. If I were to mention one of my dreams as a creative, it is to create a 3D

animation that could potentially rival those from Pixar or Dreamworks. For that ambitious dream, I would be willing to learn anything for it to come true.



#### **360 LIVE VR TOURISM**

#### **PROJECT SYNOPSIS**

A 360-degree interactive experience that acts as an informational kiosk for tourists. By using Live 360-degree video and VR technology, this project provides tourists with a more immersive insight to the places of interests in Bandar Seri Begawan. Survey conducted have demonstrated the remarkable effectiveness of VR technology as a tourism tool. No conclusion can be made about livestream effectiveness as the function cannot be implemented during development process.

#### **PROJECT INSPIRATIONS**

The project itself was suggested by my supervisor at the beginning of the FYP period, rather than of my own idea. Seeing how small Brunei's tourism industry is compared to other sectors such as the oil and gas industry, I saw this project as a valuable opportunity to cultivate my VR development skills, prompting my decision to take it on. This project emphasised on showcasing the immersive capabilities of VR technology while delivering essential information about tourist attractions that may be of interest to tourist. The main aim is to make people feel like they're in Brunei, from the comfort

#### **Project overview**

A 360-degree interactive experience that act as information kiosk for tourist. By using Live 360-degree video and VR technology, this project aims to give tourists better insight on places of interest exist in Bandar Seri Begawan. Survey conducted shows that VR technology is really effective as a tool for tourism. No conclusion can be made about livestream effectiveness as the function cannot be implemented during development process.

#### **Problem statement**

**Target User** 

- Domestic

tourist

8 11 4

controller

Foreian tourist

As of recently, tourism in Brunei is still considered a small industry, and it is also cannot be help that the current pandemic situation also impedes the growth of the industry. Report by Ministry of Primary Resources and Tourism (2021) shows a significant drop in visitors arrival by 75.9% as opposed to in 2019, as due to the pandemic.

#### Aims

To evaluate the effectiveness of live VR as a means to promote tourism to both domestic and foreign tourists

#### Objective

-To create a VR software that allows user to interact with its environment.

-To connect a live 360 camera that shows Bandar Seri Begawan to VR software.

-To implement interactivity elements when showcasing information regarding tourist attraction visible in the 360 camera.

#### **Project Development**

 360° dunamic video streaming- the 360° video will be streamed from an external cloud storage which will be connected to the program.

App feature

Interactivity – Users can interact with user

interface defined in the software using VR HMD

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Pr

used Ps

Tool Ae

• User interface - the interface within the software should be user friendly, taking notice of users who may find virtual reality devices to be complicated

#### Survey Result

Average score o General Experience: 3.8 / 5 In-application interaction: 3.8 / 5 Visual aesthetics: 3.95 / 5 Test readbility: 3.9 / 5 In-application navigation: 3.35 / 5

The application have received the average score of 4.1 out of 5 for its effectiveness as a tool to promote tourism.

About **95% of the test participant** agreed the VR technology is beneficial for tourism industry due to **immersion** provided and easier **accessibility** to the technology.

#### 360° Live Tourism App

Dayangku Nur Aqilah Syakirah Binti Pengiran Zulkifli Bachelor of Science(Hons) in Digital Media





#### MOHAMMAD MUIZZUDDIN BIN AWANG IDRIS BSc. (Hons) in Digital Media

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#### ABOUT ME

I am passionately drawn to the captivating world of creative and digital media, constantly pushing the boundaries of my abilities to

perhaps excel in this dynamic field.



#### **PROJECT SYNOPSIS**

This project aims to raise awareness regarding the dangers of distracted driving using the realism of Virtual Reality.

#### **PROJECT INSPIRATIONS**

As Brunei enters the Endemic Phase for Covid-19, a surge of automobiles is anticipated to once again fill the roads, resulting in a worrisome increase in car accidents. One of UTB's lecturers noticed the strong link between the rise in automobiles and the number of accidents on the road, and he gave me the chance to promote safe driving in Brunei. I made the decision to work on this project for my Final Year Project without a second thought since I am convinced that it is an alternative to the conventional method for raising awareness of road safety.



#### VR 3D Animation: Distractions while Driving

NAME: MOHAMMAD MUIZZUDDIN BIN AWANG IDRIS STU ID: B20192074 COURSE: BSC IN DIGITAL MEDIA

#### OVERVIEW

Despite the technological advancements, the government's road safety awareness initiatives still rely heavily on Mass Media, neglecting the potential of newer technologies such as VR. This project aims to explore the effectiveness of using VR in raising awareness of distracted driving.

#### AIMS

- Utilize VR as a new alternative in raising awareness, not just on distracted driving, but to other topics.
- To add hype to the use of VR as a new means for education, training, etc.

#### **OBJECTIVES**

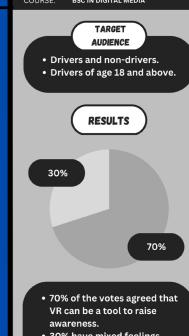
- Produce a 360 video for VR regarding the dangers of distracted driving.
- Conduct research on the effectiveness of raising awareness using VR.

#### PROBLEM STATEMENT

Majority does not own a VR Head-mounted display
Still occurs reports of motion sickness



The use of VR should be a norm when raising awareness on any topics. Government should utilize the powerful tool of VR not just in raising awareness.



• 30% have mixed feelings regarding VR.

USER FEEDBACK

- Add more details to the animation.
- Use surround sound for greater immersion.
- Despite low graphics, the message is able to be relayed.
- Ponders on getting a VR HMD.
- Motion sickness in the first few seconds.
- Add interaction if possible. Make it into a game.

#### AUGMENTED REALITY



REDISCOVERING SULTAN OMAR ALI SAIFUDDIEN MOSQUE VIA AUGMENTED REALITY

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ABU KHALEDI YUSSRRI@YASHIFE BIN ABU BAKAR



#### ABU KHALEDI YUSSRRI@YASHIFE **BIN ABU BAKAR**

BSc. (Hons) in Creative Multimedia

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#### **ABOUT ME**

I learned and communicated more through design as I got older. As a designer and an athlete, communication and determination

are important to me. Turning my imagination into reality helps me relate to people.



## REDISCOVERING SULTAN OMAR ALI SAIFUDDIEN MOSQUE VIA AUGMENTED REALITY

#### **PROJECT SYNOPSIS**

This project aims to introduce Augmented Reality (AR) to the tourism sector by displaying information about the Sultan Omar Ali Saifuddien Mosque via Augmented Reality on their mobile devices. Furthermore, this presents an opportunity for Brunei Darussalam to take the lead in harnessing Augmented Reality technology within the tourism industry.

#### **PROJECT INSPIRATIONS**

My project is inspired by my interest in Augmented Reality development. By using Augmented Reality, I would like to highlight Brunei's landmarks and their beauty. Therefore, this project will benefit the tourism industry.

**MOSQUE VIA AUGMENTED REALITY REDISCOVERING SULTAN OMAR ALI SAIFUDDIEN** 

## **ROJECT AIMS**

**ROJECT FEATURE:** 

## **ROJECT OBJECTIVE**

AUDIENCE

ARGET

**OFTWARE TOOLS** 





CODE

g CAN

## 3D RIGGING



A.J BLENDER CHARACTER

CHARACTER RIG

MUHAMAD AIMAN BIN HAJI AZMAN

**3D MECHA** 

(ROBOT)

RIGGING - INVESTIGATION ON MASCOT EFFECTIVITY FOR LOCAL COMMERCIAL

HAJI NORASLAM **BIN HAJI OTHMAN** 



#### **MUHAMAD AIMAN BIN HAJI** AZMAN BSc. (Hons) in Creative Multimedia

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#### **ABOUT ME**

I, Aiman, have been interested in animation since I was little, which led me to pursue in the creative field. If tasks were given, I will give

my utmost best to finish them. I am dedicated to enhancing my skills in the creative field to pave the way for a future career within this industry.

#### **3D MECHA (ROBOT)** CHARACTER RIG

#### **PROJECT SYNOPSIS**

3D Character rigging is a fundamental step in the animation development process, and it represents a key knowledge area for animators to master. Technological advancements has made 3D into an indispensable component across various industries, from its use in CGI for filmmaking to 3D modelling for applications such as 3D printing, etc. This project's main objective is to create a mecha-like 3D model and use 3D software to simulate its movements and joints for 3D printing.

#### **PROJECT INSPIRATIONS**

My project was sparked by my interest in a game I've been playing since semester 1 and it is also one of my personal hobbies. I am hoping that one day, I can explore 3D printing and make my own merchandise.

## **TER RIGGIN** CHARA (ROBOT) MECHA





#### HAJI NORASLAM BIN HAJI OTHMAN BSc. (Hons) in Creative Multimedia

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- instagram.com/aslam.othman/

#### **ABOUT ME**

Have been exposed to the creative field since 2014; from photography, to video work, graphic design, motion graphics, animation, and now,

3D character rigging. I aspire to do more.





#### **PROJECT SYNOPSIS**

This project aims to standardize the UTB mascot with new technology and to showcase that the mascot can be used in animation-based video. To accomplish this, the project's objectives include creating a 3D character rig of the UTB mascot using Blender, demonstrating the versatility of the rig by showcasing various movements and facial expressions. Additionally, the project aims to explore the effectiveness of incorporating the mascot into local advertising campaigns from a creative perspective.

#### **PROJECT INSPIRATIONS**

I have always find rigging a 3D character to be one of the areas that are lacking in my skill set. What piqued my interest was when I was working on rigged 3D character models available online. It made me wonder how the bones work in the model; having both freedom and limitations to be manipulated. What more can be done apart from challenging myself to do the same? So, I did just that

#### **A.J BLENDER CHARACTER RIGGING**

INVESTIGATION ON MASCOT EFFECTIVITY FOR LOCAL COMMERCIAL

Over the years, A.J has had been used in a lot in of the Universiti Teknologi Brunei's internal and promotional materials. A.J is UTB's mascot. Despite that, the usage of the mascot in motion picture is lacking. A.J remains stagnant and have minimal exposure to the public. The project's one main objective is creating the rigged 3D character via Blender, as Blender is the main software currently being used for 3D and animation modules in UTB. A research on effectivity on using mascot within Brunei Darussalam has also been conducted.

#### AIMS

• To standardize the UTB mascot with new technology.

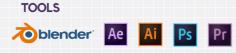
• To showcase that the mascot can be used in animation-based video.

#### **OBJECTIVES**

- To develop the UTB mascot in 3D character rigging via Blender.
- To showcase the ability of the 3D character rig on displaying different movements and facial expressions.







اونيۈرسيتى تيكنولوڭى برون<mark>ي</mark> UNIVERSITI TEKNOLOGI BRUNEI

#### **MAJOR PHASES** Sept\_Nov Dec\_Feb

Background     Modelling     User     testin	ION
at all a start a	
Texturing	9
Planning     Rigging     Diagram     And file	ose x

#### **ANALYSIS**

Two similar Instagram posts from a local government agency were compared, one with a presence of a character and one without. These two posts has proven that having a 'mascot' attracts a large number of public as follow:

2,140 likes compare with 8,120 likes.

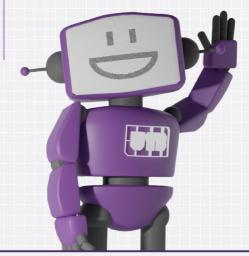
Increased number of comments from 7 to 175 comments.



Mar\_Apr

A different post that was posted on the same day received a big number of attraction despite having no mascot, which suggests the influence of the prior post, resulting in the increasing number of followers.

In conclusion, in some areas, using mascots do help in garnering viewers' interactions via social media post, although the benefit it could give towards successfulness in terms of business profit is uncertain for local scene.



HAJI NORASLAM BIN HAJI OTHMAN B20200065 BACHELOR OF SCIENCE (HONS) IN CREATIVE MULTIMEDIA

### RESEARCH STUDIES



STUDY THE IMPACT OF 3D ANIMATED EXPLAINER VIDEOS ARTIFICIAL INTELLIGENCE IN THE CREATIVE INDUSTRY

NUR ANIS SYAFIQAH BINTI HJ HAMIDON

HAZIROL HAFIZAN BIN TUAH

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#### HAZIROL HAFIZAN BIN TUAH BSc. (Hons) in Creative Multimedia

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#### ABOUT ME

I enjoy experimenting with new things so that I can keep up with the modern technology that is available. I want to gain hands-on experience

in a variety of fields, from IT to design, because it will help me in my future profession.



#### STUDY THE IMPACT OF 3D ANIMATED EXPLAINER VIDEOS

#### **PROJECT SYNOPSIS**

This research study compares the efficacy of 2D and 3D animation in order to determine the impact of 3D animated explainer videos.

#### **PROJECT INSPIRATIONS**

There are a few studies about the impact of 3D animation that can be found online, which inspired me to try to do a study of my own based on explainer videos.

## **VIDEOS** NER EXP LE I 3 $\mathbf{0}$ THE IMPA

Introduction

oortant 3D to a  $\cap$ due b 3D of are difficult to to variety of about come in ide videos data.

## **Background Study**

According to Schorn (2022), an explanation video defined by four characteristics:

- Online explanation films are brief vide
- The message's emphasis is the primary purpose.
- Visuals are important.
  - Storytelling.

## Conclusion

favorable Ē production. ceived high quality <sub>l</sub> a 2D animate explainer video re æ the result of mated g as of emotional ani ent. eedback 3D -he

## Aim & Objectives

- This research's objective is to investigate the effectiveness of 3D animation in explainer videos. The objectives of this project are: • Conduct preliminary research and case study to determine why explainer
- Use research methods to learn more about explainer videos that use 2D
  - and 3D animation • Assess the effectiveness of 3D animation in explainer videos.

## Methodology

Preliminary Investigation - the process of choosing interviewees. Interview - Three responders were chosen, Request that they watch the explanation video in both 2D and 3D.

### Result

- 3D animated explainer video have a higher rating on the production of the video, attention span on the graphic/visual and high user rating.
- Low rating on attention span on animation and storytelling
   Similar ratings were given for emotional appeal, user satisfaction, and



#### NUR ANIS SYAFIQAH BINTI HJ HAMIDON BSc. (Hons) in Digital Media

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#### ABOUT ME

I am someone who's always enjoyed creating things and appreciating all sorts of creative works. I like to learn new things and I'm never

afraid to be myself, even if others find me and my ideas to be a bit strange.





#### **PROJECT SYNOPSIS**

Ever since the COVID-19 pandemic, the world collectively realized the importance of technology in these times. Various company firms have invested in the field of Artificial Intelligence (AI), causing progress in the field to skyrocket. Now there's an AI system for almost anything, especially those to do with creative works. However, these systems come with problems that need to be addressed.

#### **PROJECT INSPIRATIONS**

Lately, there has been major online discussion of publicly available AI models, particularly those that could generate something 'new' from text. These AI models make use of content that is available on the internet which raises concerns of copyright infringement, biases in training data and the matter of AI replacing a number of creative jobs. While most people are guick to turn down these new AI models, I believe that with proper rules and a more ethical source of training data, these tools could be very useful in the creative industry but only as a tool and not a replacement.

#### ARTIFICIAL INTELLIGENCE **IN THE CREATIVE** INDUSTRY

#### INTRODUCTION

**OBJECTIVES** 

**EVER SINCE THE COVID-19 PANDEMIC,** THE WORLD COLLECTIVELY REALIZED THE **NEED AND THE IMPORTANCE OF TECHNOLOGY IN THESE NEW TIMES. COMPANIES STARTED INVESTING IN TECHNOLOGY, PARTICULARLY IN THE** FIELD OF ARTIFICIAL INTELLIGENCE (AI). **CAUSING PROGRESS IN THE FIELD TO SKYROCKET. NOW THERE'S AN AI SYSTEM FOR ALMOST EVERYTHING, ESPECIALLY IN CREATIVE WORKS.** 

#### **PROBLEM STATEMENT**

AS FASCINATING AS THE STATE OF **TECHNOLOGICAL ADVANCEMENTS ARE** NOW. THERE ARE STILL SOME ISSUES TO **BE ADDRESSED: THE BIASES IN TRAINING** DATA AND THE USE OF IMAGES WITHOUT **PERMISSION FROM THE OWNER(S).** 

THERE IS ALSO ONGOING DISCUSSIONS OF WHETHER OR NOT

**GENERATIVE AI WILL BE** ABLE TO REACH THE POINT OF AUTOMATION.



**IDENTIFY THE PROS** AND CONS OF **GENERATIVE AI** SYSTEMS, HOW IT **IMPACTS THE CREATIVE INDUSTRY** AS A WHOLE.

- POINT OUT THE **FLAWS AND IMPERFECTIONS IN** THE TRAINING DATA.
- **PROVE THAT AI WILL REMAIN AS A TOOL** FOR CREATIVES AND NOT A

**REPLACEMENT.** 

#### REFERENCES

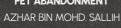
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REYNOLDS, K. (2021, FEBRUARY 24), THERE WAS AN INCREASE IN ALDURING THE PANDEMIC, SOON WE WONT BE ABLE TO IMAGINE LIFE WITHOUT IT. WORLD ECONOMIC FORUM, RETRIEVED ECONOMIC FORUM, RETRIEVED GENDA/2021/02/COVID-19-INCREASED-USE-OF-ALHERE-S-WHY ITS-HERE-TO-STAY/

NUR ANIS SYAFIQALIBINTI HJ HAMIDON BACHELOR OF SCIENCE (HONS) IN DIGITAL MEDIA

## **PROJECT GALLERY**











POSSESSION MUHAMMAD IZZAT BIN HAJI JOHARI

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AK HASRA MUHAMMED HAZIM BIN PG HAJI HASSIM

• • •



NAKHODA MANIS MOHAMMED ALIFF BIN ROSLAN







THERE IS A STRANGER IN MY HOME MOHAMMAD ALIFF BIN ZAMRI

• • •









TEMAN ABD HAKAMIL ADLI BIN HJ ABD HALIM



#### **PROJECT GALLERY**

















LANGUAGE LEARNING GAME MUHAMMAD NURI NUFAIL BIN HAJI NOHI







LANGUAGE LEARNING GAME CHEREEN TAN JIA EN

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360 LIVE VR TOURISM APP DAYANGKU NUR AQILAH SYAKIRAH BINTI PENGIRAN ZULKIFLI







VIRTUAL CAR DRIVING TEST SRIZULIAN ANAK JAPAR

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DISTRACTIONS WHILE DRIVING MOHAMMAD MUIZZUDDIN BIN AWANG IDRIS



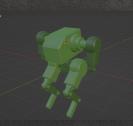


## **PROJECT GALLERY**



REDISCOVERING SULTAN OMAR ALI SAIFUDDIEN MOSQUE VIA AUGMENTED REALITY ABU KHALEDI YUSSRRI@YASHIFE BIN ABU BAKAR







3D MECHA (ROBOT) CHARACTER RIG MUHAMAD AIMAN BIN HAJI AZMAN

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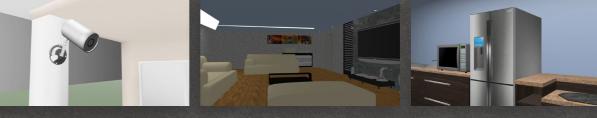
A.J BLENDER CHARACTER RIGGING HAJI NORASLAM BIN HAJI OTHMAN

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STUDY THE IMPACT OF 3D ANIMATED EXPLAINER VIDEOS HAZIROL HAFIZAN BIN TUAH







ARTIFICIAL INTELLIGENCE IN THE CREATIVE INDUSTRY NUR ANIS SYAFIQAH BINTI HJ HAMIDON

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