

**THE ROLE OF ANIMATION IN VIDEO
GAMES**

YAP HONG JIAN

**BACHELOR OF ARTS (HONS) GAME
DESIGN**

**FACULTY OF CREATIVE INDUSTRIES
UNIVERSITI TUNKUL ADBUL RAHMAN**

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Chapter 1: Introduction and Overview

1.1 The motivation for the project

The motivation of why I want to do this game is because of our main character -- Orang Minyak. Normally, people play thief type of game, those main characters are properly a normal person or human. But for our game, we will let the player play as Orang Minyak, which is one of the famous mystical characters from the Malaysian folklore.

In Malaysia folklore, Orang Minyak has some special characteristic which is almost cannot see him when he hides in the darkness, he is oily, he likes to steal, and so on. For me, I like to use those special characteristics to apply in our game and make it become our game mechanic. For example, he is hard to been seen in the darkness so we make him invisibility when he stays in a dark environment. So, the motivation that made me want to do this game is because I like to use different creative ways to present our main character.

Last, the other motivation that makes me want to do this game is because this project is based on Malaysian folklore. There have two horror games call “devotion” and “detention” which were released by Red Candle Game (Taiwan game studio) from a few years ago. These two games do give me some special feeling (extreme horror and touch feeling) when I play it. After that, I found that I will have those kinds of feeling is because I am a Chinese (this game include many elements and culture of Chinese). Nowadays, there has no much game that is related to Malaysian folklore. So, it does give me some kind of special motivation to create the project and let Malaysian play it.

1.2 Objectives

The objective of why I want to do this project is because I want to improve my skill level of anything that is including art. To put it simply, I want to train myself by doing this project. Next, although we are targeting Malaysian, I did also want to let other countries people know more about our Malaysian folklore and culture by playing this game.

1.3 Area/ Scope

For this project, I will focus on every part that is including art. But the main part that I will focus on is the modeling and animation of the character. No matter is the main character or other NPC.

Research Topic:

The role of animation in video games

Animation plays a very important role in video games the animation can decide the feeling of the games. For example, a very serious game character with clumsy/funny animation. People will think that it does not match or even the character is a very funny character. To put it simply, the animation is like the soul of everything, especially characters. In this research paper, I will start to research about how the animation decides the feeling of the game and how animation affects the game experience.

Research Question:

- 1. How animation affect the game experience?**
- 2. How does the animation decide the feeling of the game?**
- 3. Is good animation attaching more players to play the game?**

Chapter 2: Background Study/ Literature Review

2.1 Background Study

Animation has become a very important part of video games. Since 1950, a physicist who calls William Higinbotham has created a simple tennis video game. They found out that animation does help a lot for a developer to develop their game. For example, Concept design. For concept designers, they need to spend a lot of time to generate ideas for their game. But, some of them found out that they can generate ideas faster when they think about what animation is included in the game first. For example, the developer wants a game mechanic to include parkour, after that, add in other elements such as different century, assassination, and sneaking. Then a game “Assassin Creep” had been generated. Next, there is no way that animation can succeed without a character. As what we say before, the character designer can generate idea faster by through thinking of the character’s animation first. For example, they want a character that can throw a huge rock, so properly their character is a muscle man or giant monster or so on.

To prove that the importance of animation for games, we can observe the evolution of animation in video games from the 80s to now. In the 80s, Donkey Kong(1981) is likely the first game to come to mind. The animation consisted of a few pose that can be switching when the Donkey Kong is throwing barrels. And next, The Legend of Zelda(1987) has pushed the animation more further in video games with a few attack animation and some unique enemies to encounter. In every period video games have their present for the evolution of animation such as Super Mario 64 and Metal Gear Solid in the 90s, Tekken 5 and Grand Theft Auto 3 in 2000s, and now that’s a lot.

Next, the function of animation is communication. Richard Lico(2017), the Polyarc's Animation Director and Rigger said that "animation for games is one of those avenues of communication." For the main character, players know how to walk when they pressed the button, and that's the simple communication between players and the games. So, when the animation of the main character is bad or unrecognizable, players will suffer to understand the game and at the same time, affect the game experience of them. Other than that, another function of animation increases the immersive of the game. Moleman(2009), the animator of Arkane and Streamline Studios said that "he believe that body language and facial expression are the keys to making their games feel more vibrant." "Animation has such an immense influence over this communication," said Richard Lico(2017). Both of them motivate other developers that "don't say it if you can show it." They believe that if the developer intentionally tells players the information, it might break the player's immersion of the game. Compare to the player choose the wrong option, the "angry" text show on top of the NPC and the NPC show an angry facial expression on its face. The second one will be better for immersion.

2.2 Game Review

2.2.1 Grand Theft Auto- San Andreas

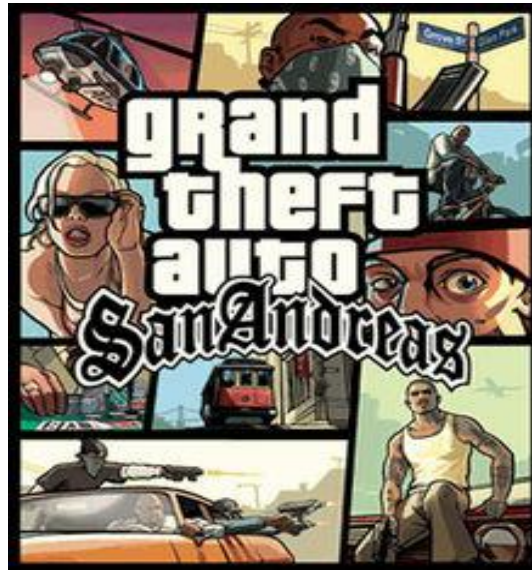


Figure 2.2.1 The game poster of Grand Theft Auto- San Andreas.

Grand Theft Auto- San Andreas is a sandbox 3D genre game. This game was developed by Rockstar North, published by Rockstar Games, and released in 2004. This game is available for multiple platforms such as Macintosh, PlayStation 2, PlayStation 3, PlayStation 4, Xbox, PC, Xbox 360, iPhone, Android, Windows Phone, and PlayStation 4. The game's elements including violence, gangster, and so on. So, there is the point, how they create those kinds of feelings? There is a lot, and one of them was animation.

Rockstar North(2004 interview by Patrick Garratt, the Contributor) indicate that they want to make their game more vibrant. Then they decide to make a few behavior or attitude for their NPC. So that their players can feel the immersion in the game. For example, when a player punches some NPC, some of them will scream and ran away for the main character, some of them will speak vulgarly and hold their fist and start to fight with the main character, some of them will instantly put out a gun and start to shoot the main character, and so on. From that, we can see the behavior, attitude, level of social, and so on of their NPC through their animation.

From the game review of Dan Adams(2018), He mentions that although at that time, the technology is not advance yet, most of the game functions and graphics are very limited. For Grand Theft Auto- San Andreas, their graphics are just low poly models and unimpressive texture. However, they did very well in their character voice. Other than that, they are given life with animation set so good that it makes visual that are otherwise average, good. All of the characters that play a role (main or supporting) are given their animation set to complete the full-bodied approach to creating a believable set of individuals. So, animation does play an important supporter role in Grand Theft Auto- San Andreas.



Figure 2.2.2 Although they speak vulgar to each other, but their animation shows that “that’s how brotherhood work.”



Figure 2.2.3 The way they stand, behavior, and body language when they talk made player feels that all of them are real gangster.

Chapter 3: Game Structure

3.1 Design Structure

3.1.1 Main Menu

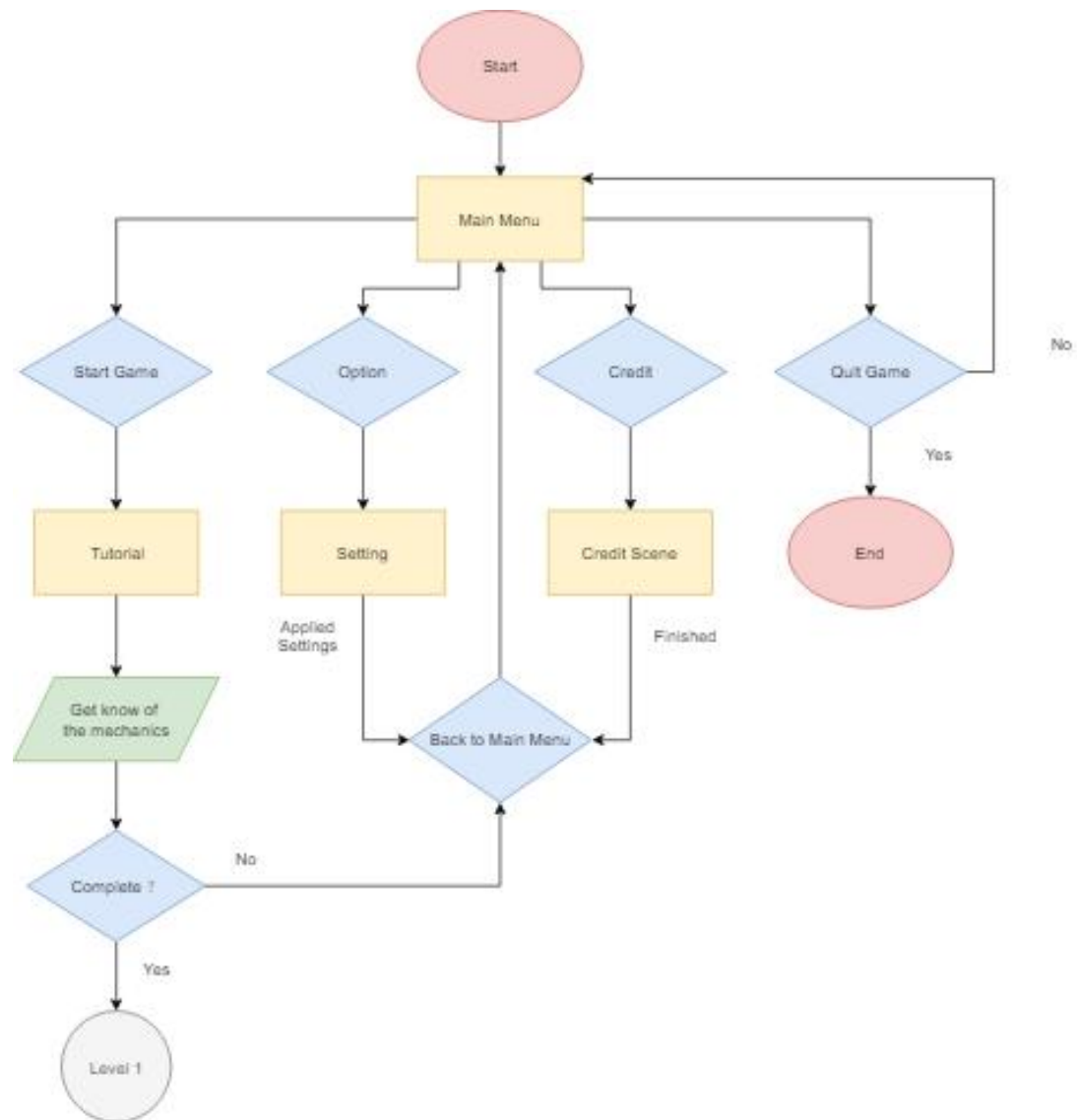


Figure 3.1 Main Menu game flow.

3.1.2 Every Level

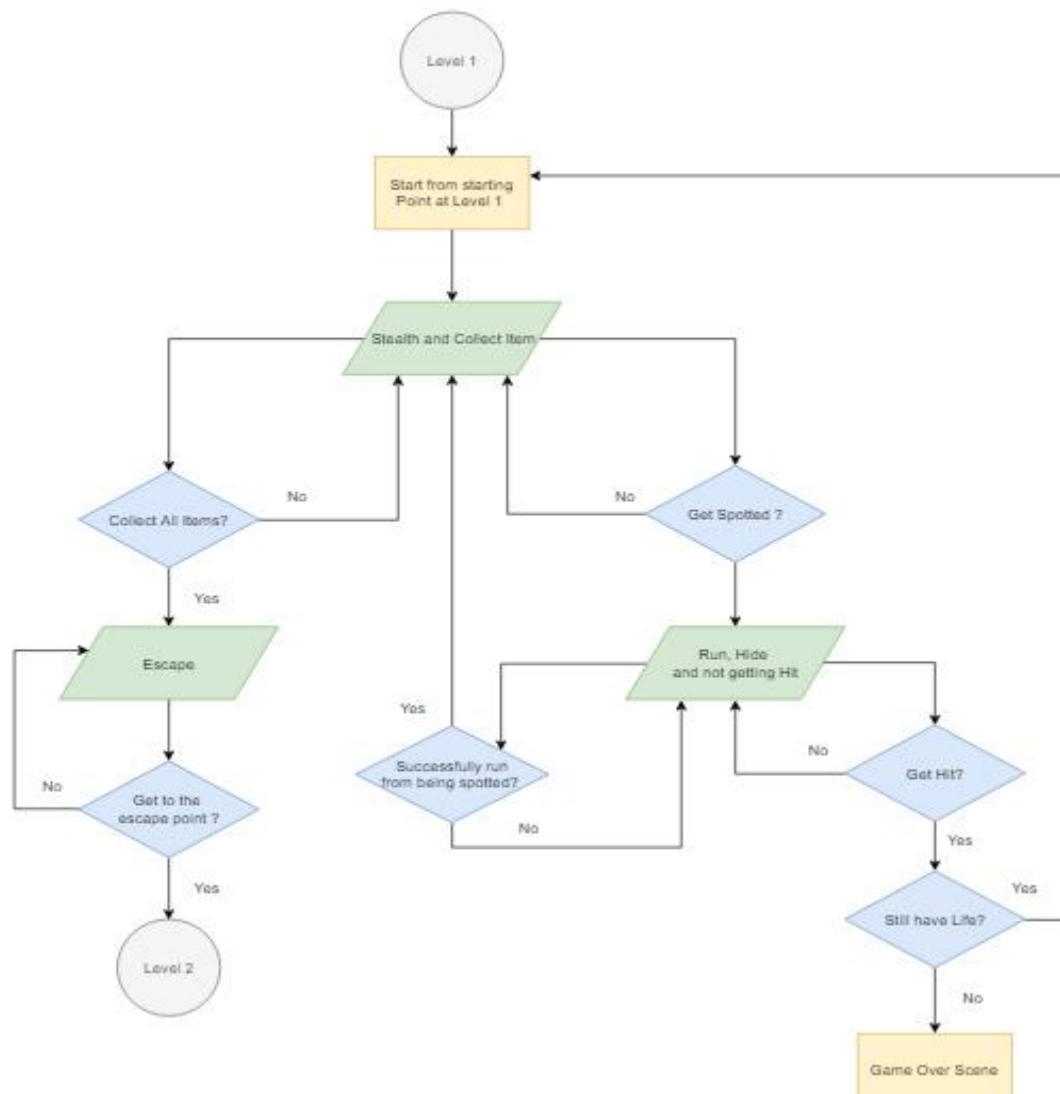


Figure 3.2 Each level game flow.

For the game structure of our games, it doesn't complex at all. Our main has 4 options to choose which are start game, option, and quit the game. Our game tutorial will set before level which allows players can understand our game mechanic first only then they can proceed to level one. In level one game structure, the player can clearly understand that what show they do which is our main gameplay stealth and collect the item(steal item). After that, find their way to escape from this level without getting spotted. Lastly, proceed to the next level. Every level game structure is similar, although the difficulty has increased, but the mechanics of the game remains. So it won't confuse the players about their main objective.

3.2 Method of Animating Character

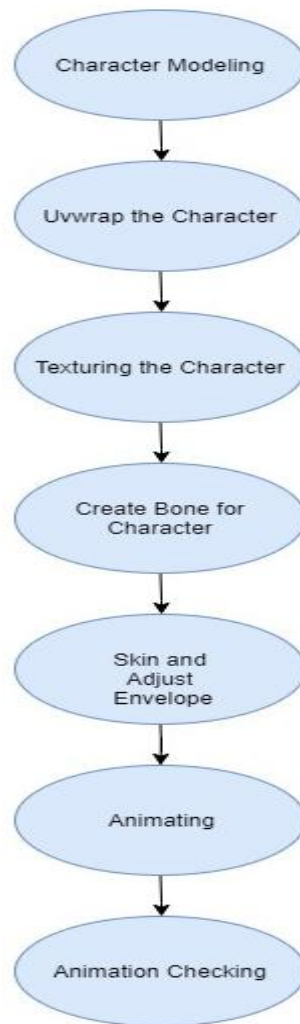


Figure 3.3 Method of animating a character.

For character animation, the build-up of the character is important, because the bad build-up of character will lead to an unexpected error while we are animating. Some of the methods are very important because they are non-adjustable such as Uvwrapping, Bone creating, and Character modeling. If any of these methods did not do well at the beginning, it will affect the result of the animation. After character build-up, we should take reference for animation or drawing out the animation before animating our character. At the same time, to make the animation better, we can also request other people to help us to do the animation that we want for proportion reference. Last, to make sure the animation is smooth, we have to check our animation frame by frame which allows us to find out the minor problem.

3.3 Hardware & Software Requirement

3.3.1 Hardware Requirement

For this project, our minimum requirement of hardware have Operating System 64-bit Window 7 and above, Processor at least reach 2.4Ghz, Memory at least has 4 GB RAM, Graphics support needs 2GB graphics card, and lastly, Storage must have 4GB available space.

3.3.2 Software Requirement

Next, software requirement that we need have Unreal Game Engine 4.21.2 for building our game, 3Ds Max 2018 for modeling and animating our characters and props, Mudbox 2018 for sculpting and painting our characters and prop's texture, Photoshop CS6 to sketch the texture for Mudbox software to applies in our characters and props, Audacity 2.3.2 for creating or cutting sound effect and background music, and lastly Premiere Pro CC 2018 for creating our game cinematic.



Figure 3.4.2 Software Requirement of our game.

Chapter 4: Design & Implementation

4.1 Game Story

In a mystery basement, mythical living things had been summoned - Orang Minyak. The witch which is the one who summoned the Orang Minyak is training it to become more intelligent and is able to help her to finish the task she has given. The task she gave was helping her to steal an number of certain things to fulfill her mystery ritual.

4.2 Game Control

W	Move forward
A	Move left
S	Move backward
D	Move right
E	Interact with item
Q	Check mission
P	Pause game
Left Shift	Hold to run
Left Ctrl	Crouch
Mouse 1 (left)	Throw
Mouse 2 (right)	Aim

4.3 Character Design

4.3.1 Orang Minyak



Figure 4.3.1 Character - Orang Minyak

The idea of the character design of the main character - Orang Minyak is harmless to humans (NPCs), but humans do hurt it. So, the design of the Orang Minyak tends to be skinning, weak, and small. Another reason to design like this is that the design will tell those players that it is a sneaking character instead of a fighting character. In addition, the outlook of the Orang Minyak is fully covered by the black oil.

4.4 Environment Design

In the folklore of Orang Minyak, it often appears at night because it has an advantage in the dark environment. So, we did set the environment in the night in our game. To make the game more interesting, we tend to make our environment in a rich people's house which has a big area to let players explore.

4.5 Level Design

4.5.1 Level 1

Normal house

For level 1, the player is only able to move around in the house. The level one consists of one living room, one kitchen, two toilets, one study room, one storeroom, and six rooms. In the game story of level, this is the first time that Orang Minyak appears in front of the human. So, the human is no alert about the Orang Minyak. That's why the beginning of level 1, the player is already inside the house.

4.5.2 Level 2

More family members

For level 2, it is a double-storey house. In level 2, players are able to move in outside, or we can say that players can only move on outside if they cannot find the way to get in the house. In the story of level 2, humans are become more alert to the Orang Minyak because of the case of level 1. They had locked every door of the house, so players have to figure out how to get into the house.

4.5.3 Level 3

Rich people house

For level 3, it is a rich people's house. In level 3, it is the same with level 2, players have to find their way to get it or else they only stuck at outside. In the story of level 3, Orang Minyak is getting famous after the case of level 2, some of the rich people start to hire guard and security to ensure they Orang Minyak won't get in. So in level 3, there has a new mechanic for the player which is the lockdown system. The player will not get out when the lockdown system is activated. After they feel the Orang Minyak is gone then they will deactivate the system.

4.6 Game Mechanics

Life system

The most basic of the game. Players will have only 3 life to finish their whole game.

The player will reduce 1 life if they are getting caught by the AI.

Interact system

Players are able to interact with certain items in the game such as the items that can throw, the item need to steal, and the door key of the house.

AI system

AI in this game is able to see, hear, shout, chase, and caught. (against us)

Stealth system

The player can hide in dark places to keep them safe and not be discovered by enemies.

Sound detection system

The player can throw certain objects to distract the AI go towards the sound source.

So the player can get in when they didn't notice the player.

Sensor system

The main character consists of 2 type of sense which is danger sense and item instinct.

Danger sense is represented by a red colour exclamation mark and item instinct is a yellow exclamation mark. The function of danger sense was telling the player that they are exposed to their enemy when it appears. Besides, the function of the item instinct was telling the player that the item is near to them when it appears.

4.7 Other Animation



Figure 4.7 Title screen and Main Menu screen

Our title screen and main menu screen are related. These two cinematic are using the object or we can say is the item that Orang Minyak wants to steal its perspective. Our title screen is showing that Orang Minyak is stealing things from different and it is still struggling to find the last one which is “us”. After the player clicks “enter” go to the main menu screen, the player will realize that the Orang Minyak is staring at us. After the player chooses an option from the main menu, the Orang Minyak will “steal us”. While it is stealing us, his hand will fully cover the screen which will become our screen transition.

4.8 Gameplay

Player needs to use the environmental advantages in order to steal all target object safely and not be discovered by enemies. Basically, our game objective is to steal all the target object that order by its lord and escape safely.

4.9 Enemy

The enemy in this game has separate into 4 types, which are adult, teenager, children, and guard. Some of them have different reactions when they saw Orang Minyak such as an adult and teenager will chase and beat the Orang Minyak, and the child will getting scared and shout for helping. Every type of enemy has a different type of strength such as every NPC expect of child NPC is harmful to the Orang Minyak, but they are easy to get distracted; every child NPC is harmless to Orang Minyak, but they do not get distracted by anything. For the guard NPC, they are very dangerous for Orang Minyak, because they got toggle light to expose in a dark environment. Besides that, they are more alert to the intruder which is far different from the normal NPC.

4.9.1 Adults



Figure 4.9.1 Example of Adult NPC

The character design and modeling of adult NPC tend to be a bigger size, at least bigger than the main character - Orang Minyak. Since it is a low poly model, it is limited to make detailed modelings such as wrinkles and face sculpting. So, to make the player can recognize it, we tend to use texture to show they are older. The animation of adult NPC consists of walking, running, attack, and curious.

4.9.2 Teenager



Figure 4.9.2 Example of Teen NPC

The character design and modeling of teen NPC are the same as the adult NPC, no matter is the size or animation. The element that only different from the adult NPC is their texturing. Since they are teen NPC, so we tend to use texturing to show they are way younger than the adult NPC. The animation of teen NPC consists of walking, running, attack, and curious.

4.9.3 Children



Figure 4.9.3 Example of Child NPC

For the child NPC character design and modeling, they are totally different from the adult and teen NPC. First, their size is smaller than both of them which shows they are powerless, but they are harmful to the main character in a different way. The way they are threatening to the main character is they will shout out their family member to come along, so the player would not know where their family member will come from. The animation of child NPC consists of walking and shouting (getting scared). Both female and male children have different animation of getting scared.

4.9.4 Guards / Security

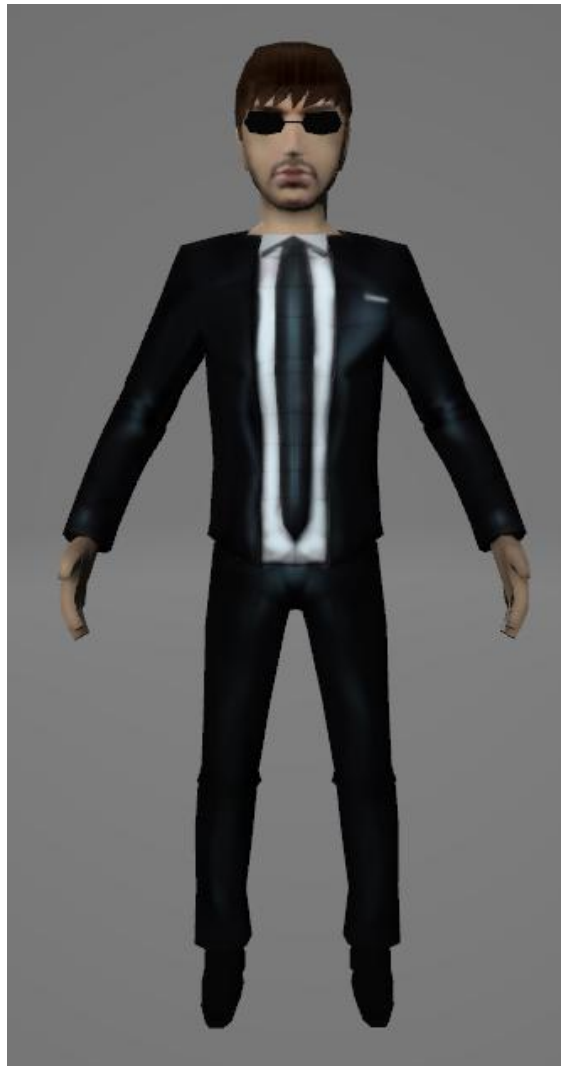


Figure 4.9.4 Example of Guard NPC

The size of the character guard NPC is the same as the adult NPC, but their animation has little difference. The only different animation between guard NPC and adult NPC is they are walking with a toggle light, so their hand will be different from the others. Besides, all the guard is wearing the same cloth/ suit in order to show their professional. The animation of guard NPC consists of walking with toggle light, running, attack, curious, and walkies talkie.

4.10 Mission

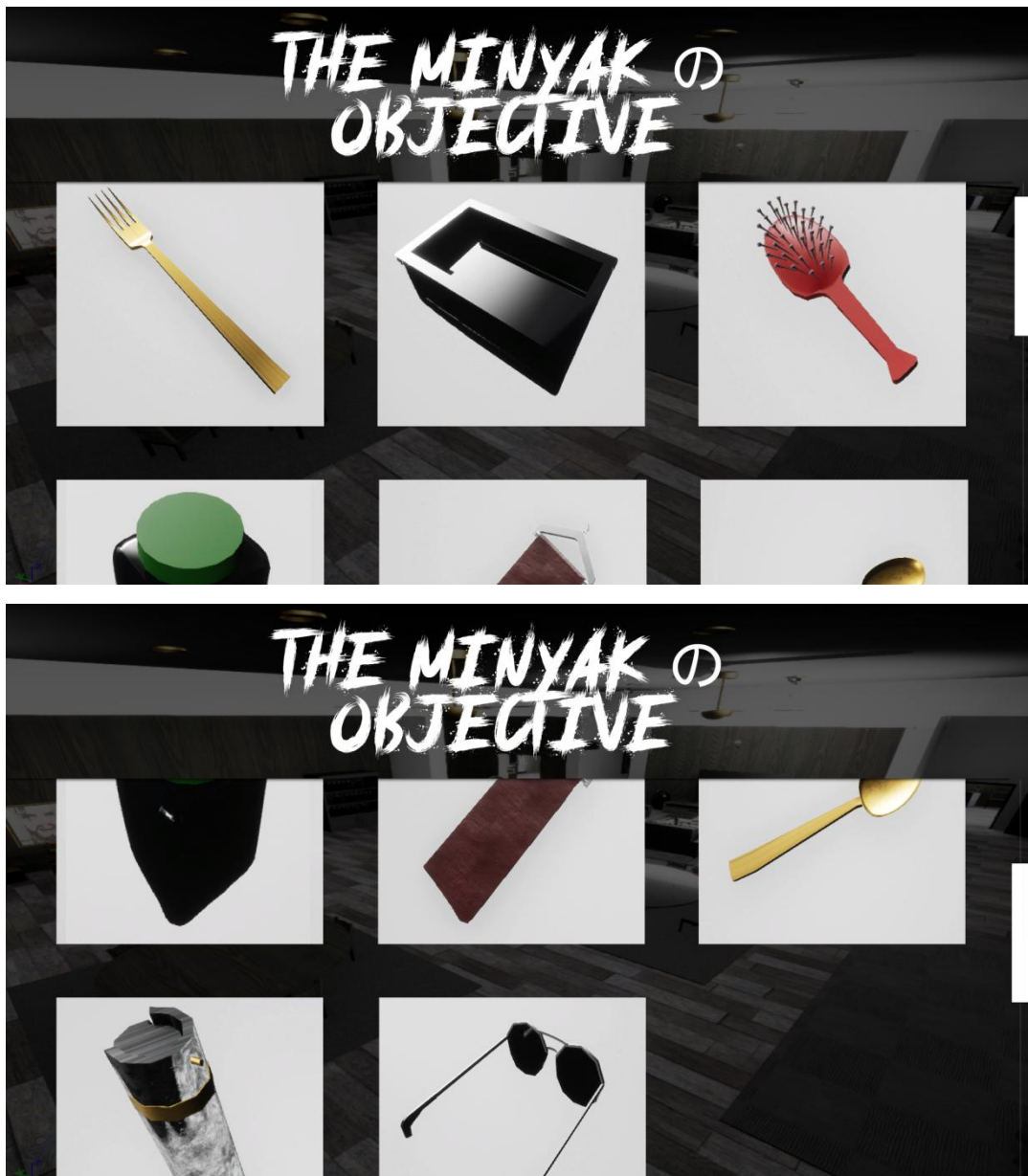


Figure 4.10.1 Mission task example

Every level has its own background image of the mission page. To make sure every image of the item is able to recognize, so we tend to make each bigger. Next, because of the limited area to put the item image. So we made the mission page can be scroll down in order to put more images and let the player see.

4.11 User Interface

4.11.1 Tutorial



Figure 4.11.1.1 Tutorial wall art example

To improve the immersion of the game, we tend to use a real hand drawing to become the wall art of tutorial. The feeling was definitely with the typing one.

4.11.2 Level Selection

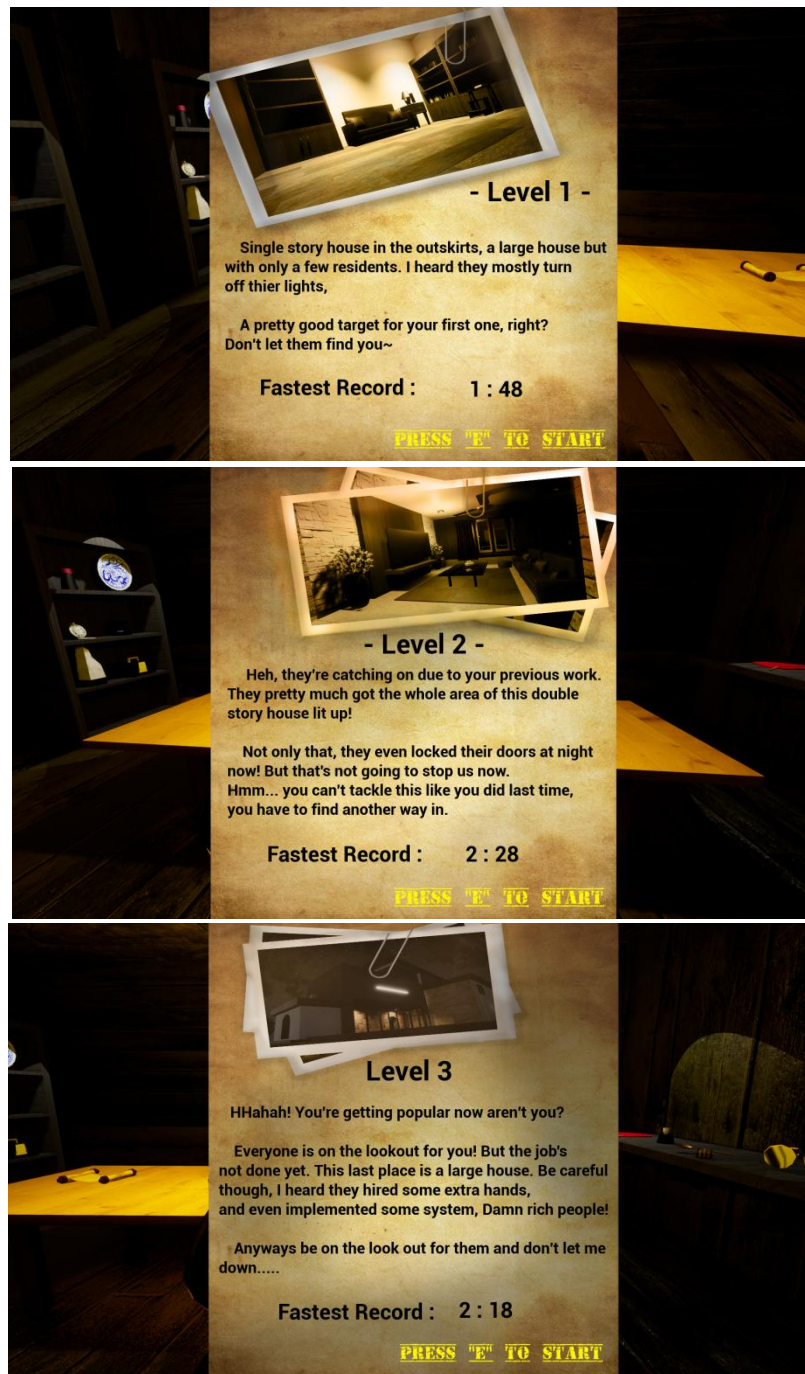


Figure 4.11.2.1 All level selection

For the level selection, we tend to use the file to represent each level. The file consists of the level's image and story. After the player completes the level, the file will show up the fastest record on it. The reason we do it as a file is because that it will increase the immersion of the game like players are getting a real delegate from someone.

4.11.3 Game Over Screen

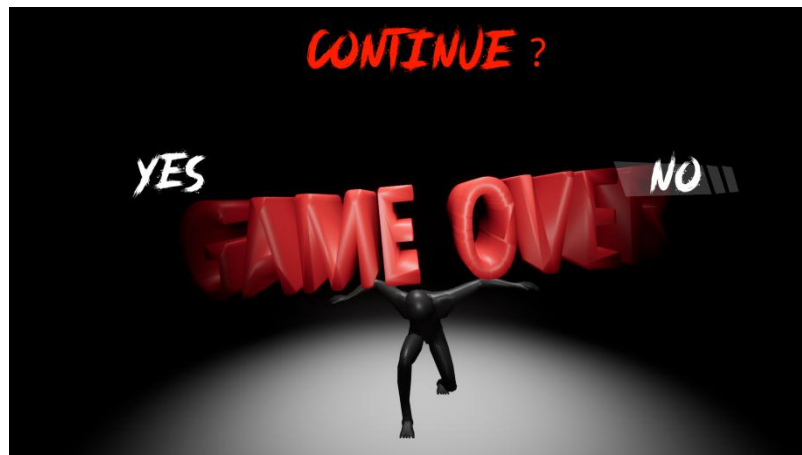


Figure 4.12.3.1 Game over choices

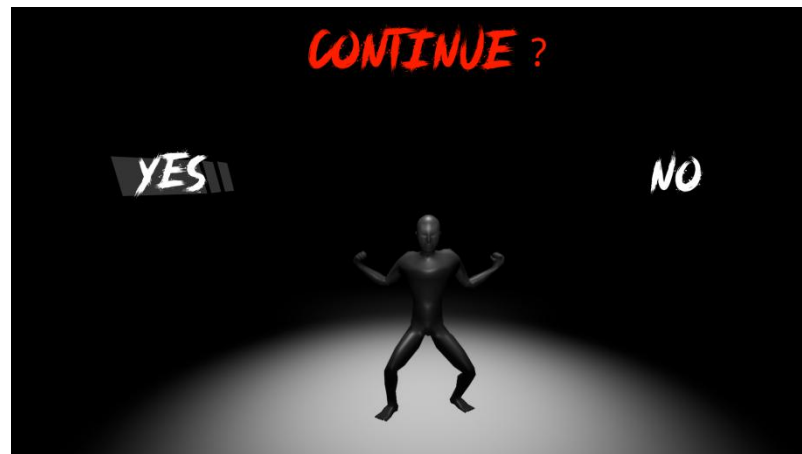


Figure 4.12.3.2 When player choose YES



Figure 4.11.3.3 When player choose NO

In the game over screen, the Orang Minyak is holding a word - Game Over. If the player chooses YES, Orang Minyak will push the word out; if the player chooses NO, Orang Minyak will crush by the word.

4.11.4 Victory Screen



Figure 4.11.4.1 Victory screen example

For the Victory screen, there will show up the current record and the fastest record in history. Since the condition of victory is stealing all the item mission tasks given and escape safely, so we add an animation that the Orang Minyak carrying a gunny bag and run to the forest in order to let the player know they are winning.

Chapter 5: Result & Evaluate

5.1 Testing

For our game testing, we tend to make this game harder but playable. We did find our course-mate and lecturer to test play our game and getting feedback from them. We did receive some useful feedback such as the item that we need to steal must be logical to place, for example, the tableware should be placed at the kitchen or dinner table, cannot put at the place like the living room, toilet, and so on. So we have to think carefully while we place our item.

5.2 Troubleshooting

At the beginning stage of the development of our game, we did struggle to model our character because we never did a character modeling before this project. So we did watch a lot of tutorials online that teaching of character modeling, rigging, skinning, and so on. At the same time, while facing any problem that we didn't face before, we will search for different solutions from the internet. Other than that, if there have any problems that we really cannot solve, we will cancel the idea and change a similar one until it reaches the result that we want.

5.3 Bugs

In our game, there still have some minor bugs that we couldn't fix. One of them was the vary of the collision of the main character. For example, a player stands near to a chair, the collision won't have any problem. But when the player starts to jump, the collision will change and lead the player stuck near the chair. So the player has to keep spending the other animation to change their collision until they can get out from the chair. Of course, there still has some minor bugs that we couldn't fix, because more of them are have to recognize and find and not always show up. So, we need to get more test play in order for us to recognize the problem.

5.4 Issues and Constraints

Since this is the first time I doing the character modeling, I was worried that I could not make it professionally, so I tend to do low poly for our character modeling. Because doing a low poly character modeling is way faster than doing a high poly character modeling. So, if I fail the first one, I can redo another one and save more time. Secondly, I have limited knowledge of using Mudbox and this software is quite unfriendly to the new user, so I was struggling with using Mudbox to create the texture the of character. Besides, since we were doing our project during the MCO period (Movement Control Order), so this is really hard for us to discuss and communicate.

Chapter 6: Future Work and Conclusion

6.1 Future Work

In the future, we would like to improve our game in every aspect. For the game mechanics, we want to make our game more interesting such as adding more functions and mechanics into our game. Besides that, we also want to create other main characters such as female Orang Minyak, fat Orang Minyak or kid Orang Minyak which will fresh out our players to keep playing our game. For the animation part, we would like to make every animation for every different character. Since now our character is actually sharing their animation by using the same bone. Besides that, we also want to solve all the minor bugs in our game. For the character modeling, we would like to renew all of our characters to become high poly if possible, because, during the development stage, we found that a high poly model is way better to improve in many aspects such as animating, texturing, detail modeling, and so on. Lastly, we will get more feedback from our players in order to improve our game.

6.2 Conclusion

To create a good 3D animation, there are a lot of things that we need to consider. Before the animating, the animator must have a good character model to proceed. A good character model consists of good looking, good structuring, good rigging, and finally good skinning. The result will be affected if any of these are bad or corrupt. However, the feeling will also become different. During the animating, the animator has to take a lot of references while animating the character moment which reaches a better result. After the animating, the animator has to check the animation frame by frame in order to help the animation become smoother.

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Appendix A

Project Paper Consultation Logbook	
Project Title	Struck bu Oil
Student Name	Yap Hong Jian
Student ID	1506597
Year/Semester	Year 3 Semester 2
Supervisor	Mr. Benedict Ng Boon Yew, Mr. Soh Wu Shyong, Dr. Aloysius Yapp

WEEK 01	
Comments: - need to generate 2 game ideas - research must relate to our game	Supervisor signature:
Progress (please circle the feedback) <div style="display: flex; justify-content: space-around; align-items: center;"> 1 2 3 4 5 </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 5px;"> Poor Satisfactory Good </div>	Date: 16/10/19
WEEK 02	
Comments: - need handing up proposal presentation slide - the dark environment mood should called as “noir mood” - should present our USP clearly	Supervisor signature:
Progress (please circle the feedback) <div style="display: flex; justify-content: space-around; align-items: center;"> 1 2 3 4 5 </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 5px;"> Poor Satisfactory Good </div>	Date: 16/10/19

WEEK 03	
Comments: - make NPC model and cloth - texturing - take reference for animation - help Paul to model some props	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 30/10/19
WEEK 04	
Comments: - redo rigging with IK instead of Biped (problem appears) - continue proceed last week work that haven't finish - investigate the transition of the animation - finish the texturing faster in order to test whether the graphic is suitable to the environment or not	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 6/11/19
WEEK 05	
Comments: - animation "throw" and "interact" need to change to the proper hand - sneaking animation can still improve - decide the NPC outlook - discuss about what to steal - finish NPC texturing and animation	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 13/11/19

WEEK 06	
Comments: - help Paul to texturing and decorating the level 1 - consider of new ideas - unlock skin - new character and animation - new feature, animation such as wearing, drinking, and eating	Supervisor signature:
Progress (please circle the feedback) <div> 1 2 3 4 5 Poor Satisfactory Good </div>	Date: 20/11/19
WEEK 07	
Comments: - proceed to next level - consider of new ideas - unlock skin - new character and animation - new feature, animation such as wearing, drinking, and eating	Supervisor signature:
Progress (please circle the feedback) <div> 1 2 3 4 5 Poor Satisfactory Good </div>	Date: 27/11/19

Appendix A

Project Paper Consultation Logbook	
Project Title	Struck by Oil
Student Name	Yap Hong Jian
Student ID	1506597
Year/Semester	Year 3 Semester 3
Supervisor	Mr. Benedict Ng Boon Yew, Mr. Soh Wu Shyong, Dr. Aloysious Yapp
WEEK 01	
Comments: - female Orang Minyak (if possible) - Orang Minyak be unique	Supervisor signature:
<div style="text-align: center;"> Progress (please circle the feedback) </div> <div style="display: flex; justify-content: space-around; align-items: center;"> 1 2 3 4 5 </div> <div style="display: flex; justify-content: space-around; align-items: center;"> Poor Satisfactory Good </div>	Date: 15/1/2020
WEEK 02	
Comments: - fix some scaling problem - jumping animation needs rework (no logic)	Supervisor signature:
<div style="text-align: center;"> Progress (please circle the feedback) </div> <div style="display: flex; justify-content: space-around; align-items: center;"> 1 2 3 4 5 </div> <div style="display: flex; justify-content: space-around; align-items: center;"> Poor Satisfactory Good </div>	Date: 22/1/2020

WEEK 03	
Comments: - Happy Chinese New Year	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date:
WEEK 04	
Comments: - find FBX exporter solution (cannot export two object in the same time) - tutorial world rework	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 5/2/2020
WEEK 05	
Comments: - tutorial world change to wall art - show sense of detection (art) - Chapter 4 report - NPC looks proportion looks weird	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 12/2/2020

WEEK 06	
Comments: - wall art ongoing - more characters - Chapter 4 continue - start UI design - level selection	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 19/2/2020
WEEK 07	
Comments: - Chapter 5 - need title screen - left 5 characters - balancing the game	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 26/2/2020
WEEK 08	
Comments: - environment assets can add extra 1 or 2 types - Chapter 4 and 5 (improve) - texturing the character	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 4/3/2020

WEEK 09	
Comments: - continue finish all the character texturing - renew some animations - new animations (for guard) - Chapter 5 and 6	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 25/3/2020
WEEK 10	
Comments: - improve all Chapter - check all texture of the character (some of of texture is missing) - continue guard's animations	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 1/4/2020
WEEK 11	
Comments: - start to do promotion stuff - game poster - game concept board - CD cover (case front, back, and on CD) - name card - game teaser	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 8/4/2020

WEEK 12	
Comments: - content of name card increase size - poster minor change - finish others promotion stuff (left teaser, concept board, and CD cover) - improve all Chapter	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 15/4/2020
WEEK 13	
Comments: - name card minor change - all promotion stuff should be consistency (title must be same font type) - teaser minor change - CD cover minor change	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 22/4/2020
WEEK 14	
Comments: - character guard need balance - Copyright problems - cross confusing player	Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good	Date: 29/4/2020

Appendix E

Final Project Title Form

Fill in the information below as detailed as you can after confirming project title.

Project Type:

☒ Product Based Project //

☐ Research Based Project

(tick the appropriate box)

Student ID	Student Name	Email & Contact no
1506597	Yap Hong Jian	jerryap9417@gmail.com 017- 2589417
1605551	Paul Yeap Lin Xiao	mokoutan98@gmail.com 016- 3319805
1603907	On Jia Hao	skyhao97@gmail.com 016- 6996296

Supervisor: Mr. Benedict Ng Boon Yew, Mr. Soh Wuu Shyong, Dr. Aloysius Yapp

Project Title:

Struck by Oil - The Orang Minyak

Project description:

Struck by Oil is a stealth game that player has to complete all the mission of each level. Player needs to use the environmental advantages to steal all target object without discovered by enemies and escape safely.

Student name	Individual Project Scope
Yap Hong Jian	<ul style="list-style-type: none">- Animation- Character Design- UI- Promotion Materials (Game Poster, Teaser, Concept Board, Name Card)
Paul Yeap Lin Xiao	<ul style="list-style-type: none">- Level Design- Assets Modeling- Lighting- UI
On Jia Hao	<ul style="list-style-type: none">- Programming