

# **UJMZ30510 Final Project**

# **Bachelor of Arts (HONS) Game Design**

# **Faculty of Creative Industries (FCI)**

October 2019

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

Our game "Struck by Oil" is a stealth game that uses a third-person camera where the player will play as "Orang Minyak" a mythical creature in Malaysian folklore, which the objective is to break into people's houses to steal a list of items. The player will have to avoid the NPC's or non-playable characters from catching them by hiding in dark places or to throw items such as a glass to distract them.

#### MOTIVATION

As we are doing our Final Year Project, our team have decided to use stealth as the main mechanic within our game, following the actions of the "Orang Minyak" or Oily Man from Malaysian folklore, whose main characteristic is that it is covered in oil, making it hard to be caught as it blends easily into the night, all the while also stealing from people. Hence, instead of having us catch it, we added the twist of playing as the "Orang Minyak" and the main mission is to not be caught.

This is one of our motivation to create a game where instead of usually playing as a hero or a good guy to capture the creature, we are playing as the creature whose main goal is the bring harm to the people, which in this case, to steal from people's home. We wanted to create a game that is different from the norm.

We wanted to show elements from Malaysia through our game. This was what we as a team wanted to do for the project, which happens to coincide with the "Malaysian Folklore" theme. This is because we saw many games showing elements from western and some eastern cultures but not Malaysian.

#### **OBJECTIVES**

We want to make at least a decent quality game for our Final Year Project. Something that can be presented to both the public and industry. Aside from that, , I would want to polish my skills as both a designer and a 3D artist.

#### **AREA SCOPE**

In the development of this game, the main area in which I'm focusing on will be the designing of the level which includes the creation and placement of props and items within the level.

#### **RESEARCH TOPIC AND QUESTION**

Upon the design of the level, my topic for research will be the influence of level design on stealth in games, as for the research question, it will be "How does the design of the level influence stealth in games?". In this research, the main thing to find out is how a level could affect players using the stealth mechanic and could the lighting or the placement of props in the level be a major factor when designing a stealth game.

According to Brycer (2017), there are two types of stealth game design philosophies which are the defensive style and the apex predator. Each focusing on a different style of stealth, thus researching into this will help with our project.

As our game "Struck by Oil " heavily focuses on the stealth mechanic for its gameplay, with this it will help me in creating a level that could be essential for elevating the experience of stealth gameplay for the game.

This research will also include how the placement of the props as well as lighting in the level are factors in the level design, as these are a part of the level that could make or break the experience for the player.

Thus, to conclude, is the area of research will focusing on the level design and how it can influence the stealth of the game.

#### **CHAPTER 2 : LITERATURE REVIEW**

As stated before, our game "Struck by Oil" is a third-person stealth game where the players play as "Orang Minyak" to steal from houses. We took several inspirations for a basis from games such as Assassins Creed and A Very Organized Thief.

Though the two games mentioned were the main inspiration, there are other games that are similar to what we are doing currently. One of them is Hello, Neighbour.



Figure 2.1: Cover for "Hello, Neighbour"

Hello, Neighbour is a first-person stealth game where the objective is to sneak into your creepy neighbour's house to uncover his secret, all the while avoiding being caught by him.



Figure 2.2 : Gameplay taken from RabidRetrospectGames on Youtube

The game's progression is structured through the use of acts. It contains 3 acts where the size and layout of the house changes accordingly. Such as Act 1 having a smaller house and it changes according to the acts.



Figure 2.3: Neighbour House in Act 1



Figure 2.4: Neighbour House in Act 2

Though it may be the same house, the player will have to find another way into the house again as the neighbour has increased its security. In this game, the player falls under one philosophy on stealth game design. According to Brycer(2017), there are two kinds of stealth game design one of them is defensive stealth design where the players are to hide from enemies that are much stronger than them where they are unable to attack or combat may be a temporary solution. Commonly found in horror games, it makes the player have a sense of weakness. Such an example can be found in the game Outlast.

However, he also pointed out the problem with this kind of design as if the player would fail the stealth and be caught, usually, it would automatically be a failure and would have to start from a checkpoint. This could create a repetitiveness in gameplay and would become boring in the long run. Another where it would affect negatively is when the puzzles within the level are illogical. This could create a situation where the player may be fed up solving them as the puzzle might not make any sense.

As I am to study how level design influences stealth, situations where the players will be caught immediately after opening a door will make them lose the game quickly. If this were to happen after the player has made an amount of progress in the game only to have one checkpoint, the player would have to go through the same thing all over again.

To add on to it, Brycer (2018) has also stated 3 types of stealth gameplay. The hider, the planner or the predator. In our game, our style of gameplay would be the hider. The hider as the name suggests means to hide from enemies, avoiding any detection. However, this does not mean that the player is unable to do anything towards the enemies. Players are able to use items or the such to stop and or distract enemies for a brief period.

Taking into account this 2 points, there are a few things we would have to keep in mind while doing this, in order to avoid or minimize the problem with the first point which is the repetitiveness, the level itself would have to give the player enough freedom to do things, meaning they have multiple options as to how they are to overcome this obstacle. With this, using the way of the 2<sup>nd</sup> point, players will be able to use items they find around the area to distract the enemies. Moreover, having multiple routes to bypass them happens to also be an option.

# CHAPTER 3: STRUCTURE/ SPECIFICATIONS 3.1 GAME STRUCTURE

Struck by Oil is a third-person view stealth game that uses the Unreal Engine 4 to develop. It consists of 3 levels with an additional tutorial level for the player to know and learn the controls.

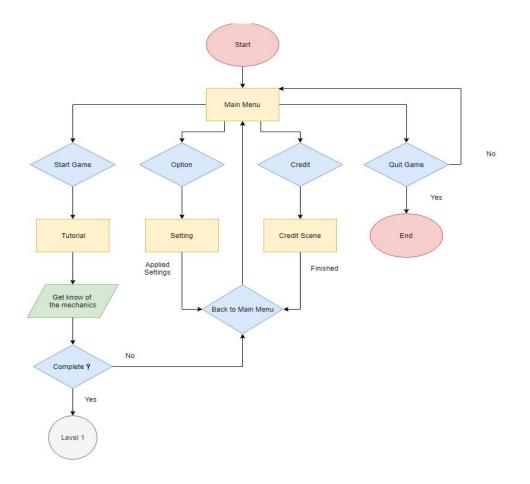


Figure 3.1: Game Flow of Struck by Oil from the Main Menu

When the player starts up the game, they will be greeted with the main menu of our game. Here they will have four options to choose, "Start Game", "Options", "Credits" and "Quit Game".

If the players would to choose the "Start Game" option, they will be brought to a tutorial level. Here the player will be able to learn the controls and mechanics of the game. If they are to complete this level, they will automatically be brought to the first level of the game for them to play.

The second option "Options", will see the players be able to change the settings of the game such as its resolution. There is a button on the screen that will bring them back to the main menu.

The third option " Credits" will bring the players to a screen which presents the credits on the developers, software used, as well sources for the music and sound. This is to acknowledge the usage and to give credit to the original creators. The credits were originally planned to be able to be viewed at the main menu, however at the end of the development, we moved the credits to be a playable cut scene once you have finished playing the game. This can be accessed through the "Start game" function which will lead the player into a level selection after beating the game once. Here they are able to replay the levels as well as review the credits again at their own pleasure.

Lastly, "Quit game", as the name suggests, allows the player to exit the game.

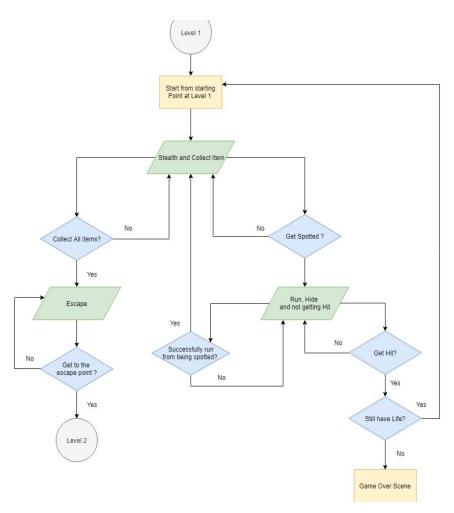


Figure 3.2: Game flow of the gameplay which starts from Level 1

Upon entering level 1 of the game, the players will start at the starting point. They will then have to explore the house using stealth to find and steal a list of items given to them. The player will have two outcomes from here on. It is either they find the items listed and make way to the escape point in which they will move on to level 2 or they get spotted.

While being spotted, the players will have to run, hide or avoid getting hit by the NPC's (Non-Playable Characters). If they are successful in doing so, they will continue on with their objectives of stealing the items and reaching the escape point. If not and they are caught by the NPC's they will lose a life if they still have them and restart from the starting point or if the run out of lives, they will enter a game over scene.

This flow goes on for the rest of the levels until the third level where after successfully stealing all the items required and escaped, they will be greeted with a win screen.

#### **3.2 REQUIREMENTS**

For the software that is required in this development of the project, first off will be Unreal Engine 4.21. This is the game engine where the game will be developed. This engine encompasses most of the development such as the coding, the level design, materials as well as making of cut scenes.

Second would be 3DS Max 2018. This software is where the modelling of both assets and characters will be done. Furthermore, this software is also used in the making of the animations for the game.

The third software used would be Mudbox 2018. This software is mainly used to do texturing of assets and models before moving on to the material placing.

Photoshop and Illustrator CS6 will be used in the designing of the posters as well as editing the materials to fit the game's theme.

#### **3.3 METHODOLOGY**

As for the progress flow of the level design, I started of with making a basic layout in Unreal 4. Using the Binary Space Partitioning or BSP, I created the layout of the level. After that, added in window holes and doorways as well as temporary assets to figure out the placement of props.

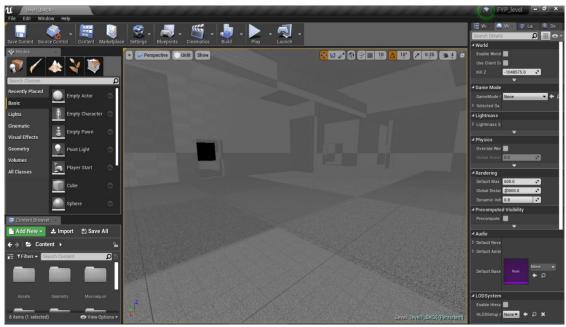


Figure 3.3: Basic Layout of level 1, Perspective view

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Figure 3.4: Basic Layout of level 1, Top view

After finishing the level layout, started modeling the props and assets that are used in the level. Made the larger props first as it needed to be placed in the level to see the overall view of the level.

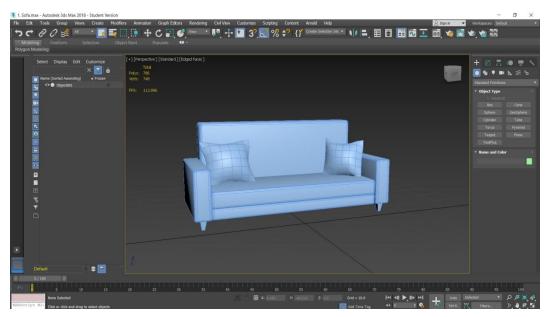


Figure 3.5: Model of a sofa made

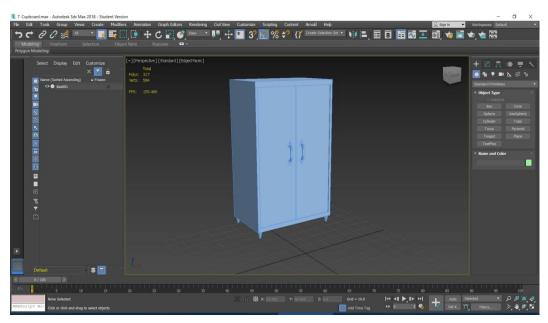


Figure 3.6: Model of the cupboard

The models were then exported into Unreal engine 4 to be placed in the level. As our game is based on people's homes, I had to think about what kind of items such as furniture, appliances. Hence I made the assets for the level first before others. Another point to make is there a lot of assets that are found in the level, hence most of the time was spent on creating the assets first. After finish placing the assets into the level, I experimented by putting in the lighting.

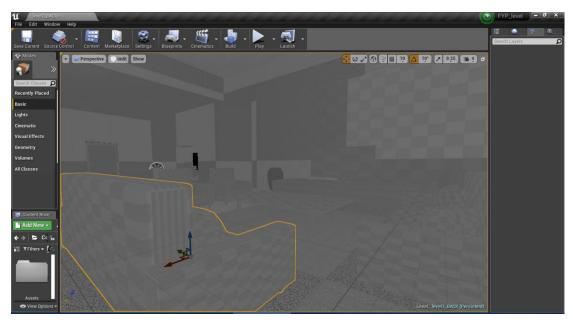


Figure 3.7: Assets placed into unreal engine 4

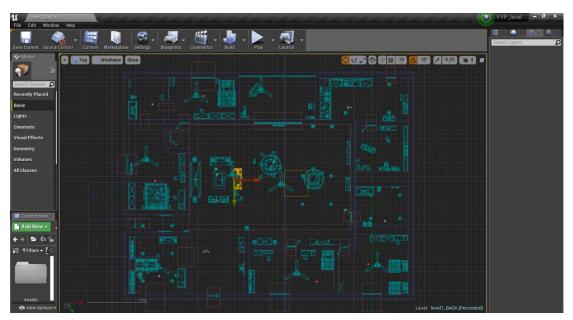


Figure 3.8: Top view of the level with assets inside

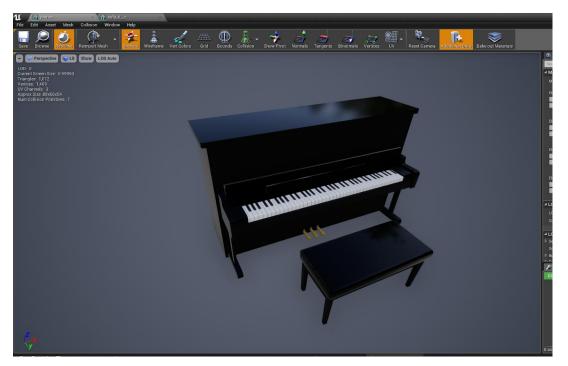
### CHAPTER 4 4.1 PROPS DESIGN

As the game setting is set in a modern time home, our props are modeled and designed to fit this. Hence many of the props can usually be found inside and around a modern Malaysian home, things such as sofa and cabinets. The props are split into two categories, static unmovable props and the collectable/ throw-able props.

First off are the static unmovable props. These props are placed in the level to give off the feeling of a home. Another point for these props is to allow the player to behind the props while avoid being detected. Not only that, some assets can be use to gain access to higher places by jumping on top of them.



4.1 Model for the sofa (top) and rivelt revolve modern upholstered sofa bed(bottom)



4.1.2 Piano

Most of these props are designed with a more modern looking feel to it which is a more simple design without unnecessary extra designs on it, reflecting modern day designs.



4.2 Ceiling fan model

However, not all of the props have a modern design to it, we implemented some props with a more antique design. One of the main reasons for this is to show the traditional side of a Malaysian home which still includes some cultural influences. This more traditional designs can be seen in the second category which is the collectable/ throw able props.

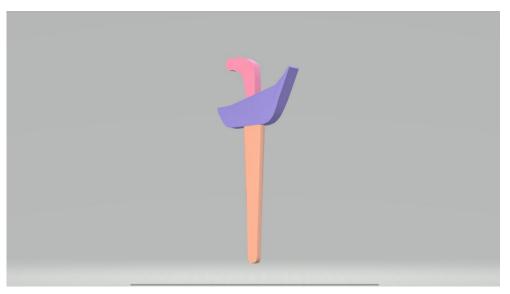
These props are also categorised as throw-able and collectable. Throw-able are props that can be thrown at any direction to distract enemies from coming towards you, while the collectable props are those which are important and needs to be obtain before the player is able to complete the level.



4.3 Sunglasses (collectable)



4.4 Glass bottle (throw able)



4.5 Keris (collectable)

#### 4.2 Level Design

As stated, our game focuses on the stealth mechanic for its core gameplay. The players are to hide from shadow to shadow without being found out by the enemy AI's roaming around the area.



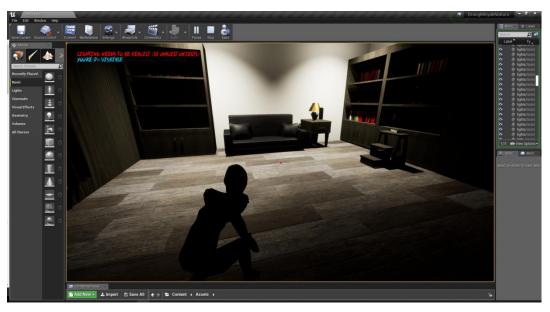
4.6 Level 1 house

The level consists of different areas where the player is able to move. The player will encounter such areas which is lit up by lights and areas where it's covered by

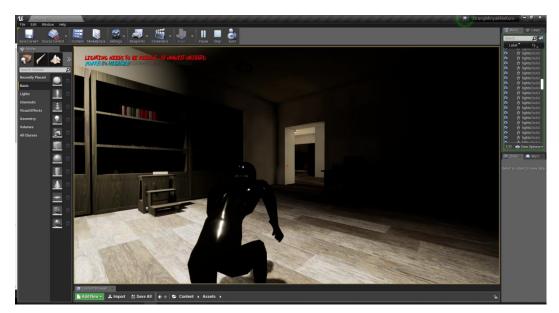
shadows. If the player would enter into the dark areas they would not be detected by the AI's.

However, if they were to enter areas which are lit, they would be found if there are AI's within close vicinity. Thus the AI's would give chase to the player. Using this to move around the house, they would have to find items that are spread across the level. These items are placed in certain areas where the player would think of when seeing the item, for example, forks and spoons can usually be found in the kitchen or on a table.

For level 1, these areas where the steal-able objects are are usually lit up, this is to allow the players to be able to identify them easier however also add a bit of difficulty to it as the AI's will be able to see and chase after the player more easily.



4.7 Player in shadow area shows 0% visibility (top corner) used to test the function

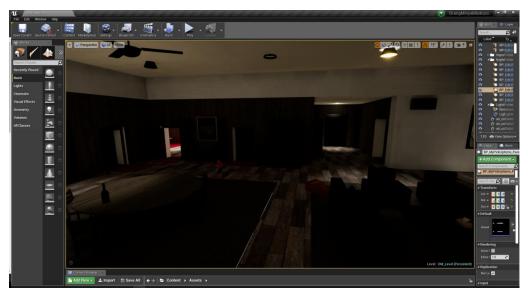


4.8 Player is visible under lit areas with visibility of 1% (max value)

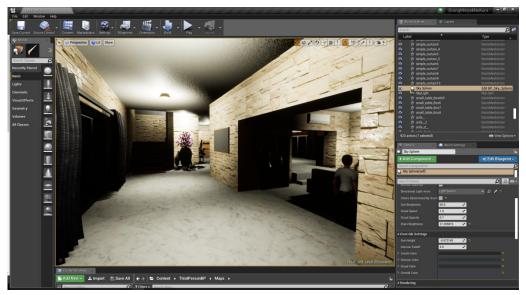


4.9 spoon found on a rack in the kitchen

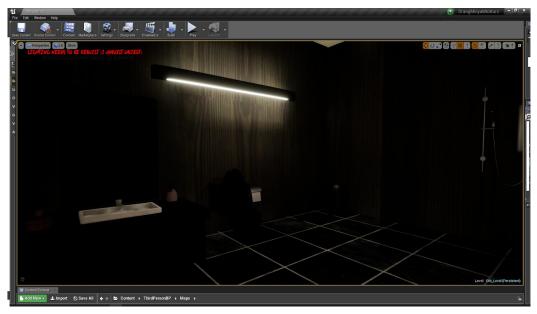
As a form of progression, the amount of dark areas and lit areas are tweaked to the level. As such, it can be seen in level 1 that there are more dark areas and "safe rooms" which are rooms with emissive lights but AIs would not be able to detect the player, making it safe for the player to hide in them.



4.10.1 More dark areas and safe rooms in level 1

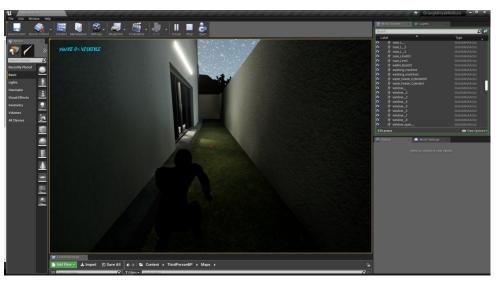


4.10.2 Lighter areas and less places to hide in level 2



4.10.3 Level 1 safe room with emissive lighting

In level 1, the player starts directly inside the house, however from level 2 onwards, they will start outside of it and have to find a way inside the house as well, this has to do with the story of the game where the people have increased security and is harder to break into their houses.



4.11 Level 2 Outside of the house, within the compound

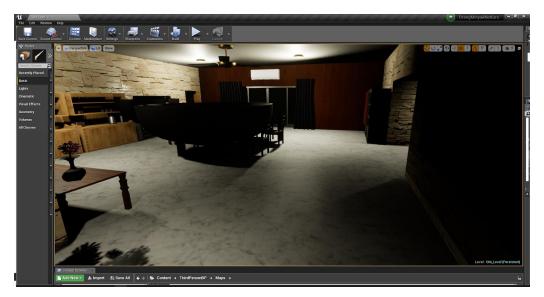
Level 2 and 3 are designed quite similarly, they both start of outside of the house. In level 2, the outside is relatively safe as there are no enemies that will patrol the area aside from the backdoor in which enemy AI's will occasionally come out and patrol the small area at the back. They would have to find another way into the house, however both the front and back door is locked and can only be opened when a key is stolen from one of the AIs

In order for the player to enter the house, they would have to find another way in, either through an open window or a balcony, this makes it they have multiple ways to enter as well as exit the house.



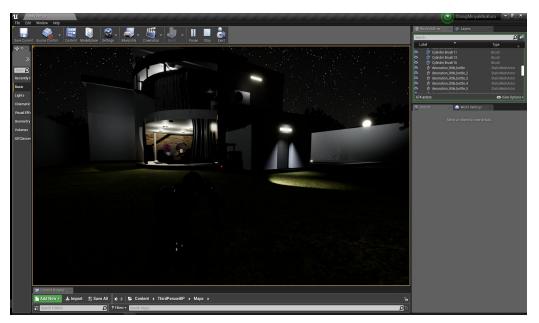
4.12 Back area of level 2 where AI's will patrol

Within the house, compared to level 1, it is more lit up and to have lesser dark areas for the players to hide. Furthermore, as it was designed to be a double-storied house, the AIs are able to move between the floors, making it harder for the player to stay in one place for too long. This also makes maneuvering much harder as the player needs to watch out for the kid AIs which will alert the adult AIs to come running to it.



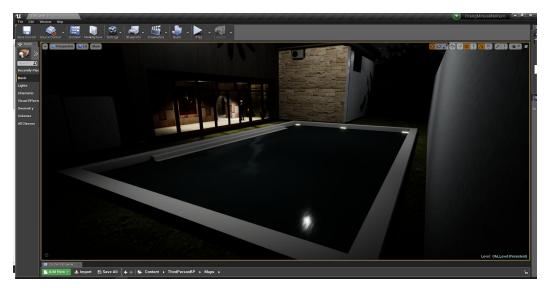
4.13 Lesser dark areas for players to hide

The outside of level 3 is no longer fully safe, as there is a guard AI who will patrol the area. This guard AI has a torchlight, making hiding in dark areas not as safe as before, they will catch the player if the torchlight is pointed towards them.



4.14.1 Level 3 outside with guard patrolling

However, to counter this there are more areas to hide outside as well in level 3. The player now needs to hide behind trees are inside the pool that can be found outside.



4.14.2 Outdoor pool as a hiding spot

Level 3 still retains the multiple ways to enter and exit the building. Though compared to level 2, it much harder to accomplish it as the player can be easily detected by the guard AIs. The level was designed like this to show the progression of difficulty and making the players to use what they have had learned in the previous levels to clear this one.



4.15 Guard AI patrolling the area inside the house

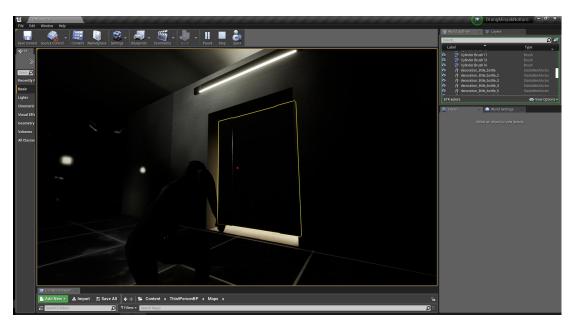
Locked doors are also present in level 3. In level 2, the locked doors were optional for the player to open or not, as they can still enter and exit the house without

opening it. however it is now a must to open the door as there will be a main item to be stolen inside.

One thing that's consistent across all levels is that they all have a safe room for the players to hide in. These rooms, the bathrooms, are dark and AIs would normally unable to detect the player unless it is the guard AIs in which they might.

The reason for this is to allow the player to have a chance in clearing the level. Level 3 is the hardest level as the guards can easily spot the player. Thus the design for this level, instead of smaller dark areas here and there like in level 2, focuses more on the vertical aspect of it. This makes it so that the safest place for the player are the places they cannot reach. The player thus have to be aware of their surroundings, even with the whole area lit up, they are still able to reach a safe space by jumping on top of objects such as cabinets or beds.

One more thing to add, is the implementation of a lockdown system. Players when spotted by one of the guard AIs, it will trigger a lockdown in which few rooms will be locked and unable to enter or exit until the alarm goes off. Hence, players will have to be careful and stay alert to not let this happen and hider their progress.



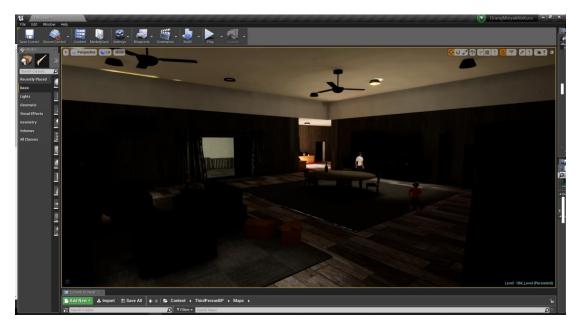
4.16 Safe spot in level 3

To summarise, the levels are designed in accordance with the difficulty. This can be seen in where level 1 is much larger with more places to hide while level 2 is narrower and lesser areas to hide. Furthermore, hiding places such as dark corners and behind objects were created through the usage of such lights. These objects that are often found in homes are used to create these hiding places as well as using it to distract the AI's instead of just having to fill the level, as such players can use these objects in the environment to their advantage.

#### **CHAPTER 5: RESULT AND EVALUATION**

One of the main things that were tested first was the lighting itself. During development, there were problems with the lighting where it would be to bring in some areas and totally pitch black in others. This was due to some of the values were not properly used, most importantly the intensity value.

Following on from the lights, the dark areas still had problems as when it was being implemented, the look of it was different when after it was build compared to before.



5.1 in development mode, lighting was darker



5.2 After building the room becomes lighter

Next would be the shadows cast by the objects in the environment were not easily distinguishable. This caused it being harder to find areas that can be used to hide and those which are lit. It was being blended too well. To fix this, the light intensity had to be higher and the spacing had to be spaced out much further than what was used. Changing from using a point light to a spotlight also helped with fixing this.

Constraints for this is tied to personal skill, as being unable to use and understand more advanced functions of the engine, in this case Unreal Engine 4, most of the time was searching up tutorials and trying to experiment with the settings in the engine. This cause some functions and ideas to be simplified, such as the cut scenes and transitions etc.

The 3D models were purposefully simplified as to save time on making something too complicated and difficult as there are many assets found in the game. Many of the assets needed to be reused as there were time constraints, hence within the level there are many similar looking assets that can be found.

#### **CHAPTER 6: FUTURE WORK AND CONCLUSION**

In the future, there are many aspects that I would like to improve for the game. One of them is to enhance and make the models for the game to be unique and different. Such as more modern designs for tables and couches as many of our assets are reused with just a different material. Following up on that, adding and improving some textures for the assets as well, since many of them look flat and does not look realistic.

Another aspect that I would want to improve is the lighting of the level. Many parts of the lighting is still unnatural. Learning more about the lighting system for the game engine will be a priority.

Implementing more functions such as being able to crawl to hide under tables and beds, or being able to hide in closets are things I would like to add to the game. As such many of the assets needed to be redesigned to be able to fit the functions, this is because many assets such as the closets were designed to not be empty and instead was to be used as a wall, which is solid.

Improving the level design to be even better would be one of the future works. As per normal, assets within houses are usually placed along the walls as to create space for walking and activities in real life. Due to this, being able to create more places for the player to be able to hide would be a priority such as allowing them to hide in closets or under the tables.

In conclusion, creating a level especially one that revolves around stealth is quite different compared to normal. Not only would one have to design the level where the player knows where to go, but also knowing how to design places where the player can hide. Aside from that, other factors that would affect the level design such as the lighting in which creates shadows for hiding and the options the player has to go about in the level.

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https://arstechnica.com/gaming/2017/12/hello-neighbor-review-an-all-around-bad -time-in-surreal-subu rbia/.

### 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
1605551	Paul Yeap Lin Xiao	Mokoutan98@gmail.com 016-3319805
1603907	On Jia Hao	Skyhao97@gmail.com 016-6996296
1506597	Yap Hong Jian	Jerryyap9417@gmail.com 017-2589417

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 players have to steal certain items in order to complete the level. Players will need to use environmental advantages to steal the target items all while avoiding being detected by the enemies.

Student name	Individual Project Scope
Paul Yeap Lin Xiao	- Level Design - Asses Modelling - Lighting - UI design
On Jia Hao	- Programming - Sound Effect Design
Yap Hong Jian	<ul> <li>Character Animation</li> <li>Character Design</li> <li>UI Design</li> <li>Promotional Materials ( eg Game Poster, Teaser, Concept Board, Name card)</li> </ul>

# Appendix A

Project Paper Consultation Logbook		
Project Title	Struck By Oil- The Orang Minyak	
Student Name	Paul Yeap Lin Xiao	
Student ID	1605551	
Year/Semester	Year 3 Semester 2	
Supervisor	Mr Benedict Ng Boon Yew, Dr. Aloysius Yapp	

WEEK 01	
Comments:	Supervisor signature:
- Came up with 2 game ideas and to propose it	
- Came up with a research topic and question	
Progress (please circle the feedback)	Date: 16/10/2019
1 2 3 4 5 Poor Satisfactory Good	
	I
WEEK 02	
Comments:	Supervisor signature:
- Change the usage of "Dark Environment" to "Noir Mood" when describing	
the mood of the game.	
- USP should be more detailed (not interesting enough) change to	
e.g. sound detection of the A.I or playing with the mood	
- Make sure that the research question is related to the game.	
	· · ·
Progress (please circle the feedback) 1 2 3 4 5	Date: 16/10/2019
Poor Satisfactory Good	
WEEK 03	

Comments:		Supervisor signature:
- establishing shot to show level		
- idle sound makes the player unable to stay	in one place	
- Plan B: day night system		
-Designing the level must not be obvious in	showing the races.	
Make it ambiguous.	-	
Progress (please circ		Date: 30/10/2019
1 2 3 Poor Satisfact		5
	WEEK 04	
Comments:		Supervisor signature:
	6.1	
Mr.Ben: Speed up creating and placement of		
combine with A.I to see the behav	viour.	
	1 1	1.1
Then experiment with the lighting	g and placement to see the stea	lth
	-	lth
	ts by next week	lth
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3	ts by next week le the feedback) 4	
Mr.Ben: Finish up the level, put all the asse Progress (please circ	ts by next week le the feedback) 4 ory Good	Date: 6/11/2019
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3	ts by next week le the feedback) 4	Date: 6/11/2019
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3 Poor Satisfact	ts by next week le the feedback) 4 ory Good	Date: 6/11/2019
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3 Poor Satisfact Comments:	ts by next week le the feedback) 4 ory Good WEEK 05	5 Date: 6/11/2019
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3 Poor Satisfact Comments: - Finish adding the details e.g. small / throw	ts by next week le the feedback) 4 ory Good WEEK 05	5 Date: 6/11/2019
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3 Poor Satisfact Comments: - Finish adding the details e.g. small / throw - certain animations like doors, fans and cat	ts by next week le the feedback) 4 ory Good WEEK 05	5 Date: 6/11/2019
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3 Poor Satisfact Comments: - Finish adding the details e.g. small / throw - certain animations like doors, fans and cat - consider lighting colours	ts by next week le the feedback) 4 ory Good WEEK 05	5 Date: 6/11/2019
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3 Poor Satisfact Comments: - Finish adding the details e.g. small / throw - certain animations like doors, fans and cat - consider lighting colours	ts by next week le the feedback) 4 ory Good WEEK 05	5 Date: 6/11/2019
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3	ts by next week le the feedback) 4 ory Good WEEK 05 r-able objects binets he together	5 Date: 6/11/2019
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3 Poor Satisfact Comments: - Finish adding the details e.g. small / throw - certain animations like doors, fans and cat - consider lighting colours Mr. Ben: finish the level design and combin Mr. Ben: finish th	ts by next week le the feedback) 4 ory Good WEEK 05 *-able objects binets he together le the feedback) 4	5       Date: 6/11/2019         5       Supervisor signature:
Mr.Ben: Finish up the level, put all the asse Progress (please circ 1 2 3 Poor Satisfact Comments: - Finish adding the details e.g. small / throw - certain animations like doors, fans and cat - consider lighting colours Mr. Ben: finish the level design and combin Progress (please circ	ts by next week le the feedback) 4 ory Good WEEK 05 *-able objects binets he together le the feedback) 4	5       Date: 6/11/2019         5       Supervisor signature:         Image: Supervisor signature:       Image: Supervisor signature:         Image: Date: 13/11/2019       Date: 13/11/2019

Comments:			Supervisor signature:
-Improve lighting, too da	k ( might have problem when pr	resenting using the	
projector)		6 6	
-Chapter 3 · Add what I d	id (progress) e.g props and level		
- Objective before level a			
Mr. Ben: Adding a level s	elect or a time attack mode		
_	r easter eggs (since we aiming fo	or a funny game)	
-	ress (please circle the feedba		Date: 20/11/2019
1 2 Poor	3 4 Satisfactory	5 Good	
	WEEI		
Comments:			Supervisor signature:
- Improve lighting (too da	rk)		
-replayability is low as w	nen it's replayed, the players wil	l know the items	
location			
	ress (please circle the feedba		Date: 27/11/2019
1 2 Poor	3 4 Satisfactory	5 Good	
		0000	

# Appendix A

-	Project Paper Consultation Logbook
Project Title	Struck By Oil- The Orang Minyak
Student Name	Paul Yeap Lin Xiao
Student ID	1605551
Year/Semester	Year 3 Semester 3
Supervisor	Mr. Benedict Ng Boon Yew, Mr Soh Wuu Shyong, Dr. Aloysius Yapp

WEEK 01	
Comments:	Supervisor signature:
- Fix some parts of the level (visually)	
- Main Objective unattractive	
-Make the stolen stuff more unique	
Progress (please circle the feedback) 1 2 3 4 5	Date: 15/01/2020
Poor Satisfactory Good	
WEEK 02	
Comments:	Supervisor signature:
-Change white wall texture	
-lighting not clear between light and shadows	
-fix scaling of Level 1	
Mr Ben: the reticle has to be more obvious	
-Reset the position of the AI ( AI would be able to camp at the	
respawn point)	
- Level 2 need to change the layout ( doesn't make sense for	
progression)	
-highlight distance not obvious when hovering over it ( change to	

<ul> <li>lock the camera</li> <li>Level 1 can allow the players to go outside but within a limited area</li> <li>Progress (please circle the feedback)</li> <li>1</li> <li>2</li> <li>3</li> <li>4</li> <li>5</li> <li>Poor</li> <li>Satisfactory</li> <li>Good</li> </ul> WEEK 03 Comments: Supervisor signature:
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good WEEK 03
Progress (please circle the feedback) 1 2 3 4 5 Poor Satisfactory Good WEEK 03
1 2 3 4 5 Poor Satisfactory Good WEEK 03
1 2 3 4 5 Poor Satisfactory Good WEEK 03
1 2 3 4 5 Poor Satisfactory Good WEEK 03
1 2 3 4 5 Poor Satisfactory Good WEEK 03
Poor Satisfactory Good WEEK 03
WEEK 03
Comments: Supervisor signature:
-CNY BREAK-
Progress (please circle the feedback) Date:
1 2 3 4 5
Poor Satisfactory Good
WEEK 04
Comments: Supervisor signature:
- Doorway make it rounder, square looks unnatural
- Doorway make it rounder, square looks unnatural.
<ul><li>Doorway make it rounder, square looks unnatural.</li><li>Level 2 scaling needs to be fixed.</li></ul>
- Level 2 scaling needs to be fixed.
<ul> <li>Level 2 scaling needs to be fixed.</li> <li>Mr. Ben: -Text in tutorial change to a texture ( floating text breaks the feel )</li> </ul>
<ul> <li>Level 2 scaling needs to be fixed.</li> <li>Mr. Ben: -Text in tutorial change to a texture ( floating text breaks the feel ) <ul> <li>Change the tutorial white box</li> </ul> </li> </ul>
<ul> <li>Level 2 scaling needs to be fixed.</li> <li>Mr. Ben: -Text in tutorial change to a texture ( floating text breaks the feel )</li> </ul>
<ul> <li>Level 2 scaling needs to be fixed.</li> <li>Mr. Ben: -Text in tutorial change to a texture ( floating text breaks the feel ) <ul> <li>Change the tutorial white box</li> </ul> </li> </ul>
<ul> <li>Level 2 scaling needs to be fixed.</li> <li>Mr. Ben: -Text in tutorial change to a texture ( floating text breaks the feel ) <ul> <li>Change the tutorial white box</li> </ul> </li> </ul>
<ul> <li>Level 2 scaling needs to be fixed.</li> <li>Mr. Ben: -Text in tutorial change to a texture ( floating text breaks the feel ) <ul> <li>Change the tutorial white box</li> <li>-finish level 1</li> </ul> </li> </ul>
<ul> <li>Level 2 scaling needs to be fixed.</li> <li>Mr. Ben: -Text in tutorial change to a texture ( floating text breaks the feel ) <ul> <li>Change the tutorial white box</li> </ul> </li> </ul>

		W	EEK 05		
Comments:					Supervisor signature:
		indicator for enemies (simi	ilar to spider s	ense)	
- ]	Delay the ener	nies detection time			
- :	switches to on	and off the lights to make	it more intere	sting	
- '	Tutorial needs	to be grammar checked			
- Improve the	e 3D models				
- Chapter 4 to	be sent for cl	hecking			
	Progr	ess (please circle the fee	edback)		Date:12/02/2020
1	2	3	4	5	
F	Poor	Satisfactory	Go	bc	
		W	EEK 06		
Comments:					Supervisor signature:
- Finish Leve	el 2				
- Environmer	nt for level 1 a	nd 2			
-Finish level	Selection				
-Chapter 4 (c	hecking)				
	0)				
		/ 1			D-+40/02/2020
1	Progr 2	ess (please circle the fee 3	edback) 4	5	Date:19/02/2020
	2 Poor	Satisfactory	4 Go		
		W	EEK 07		
Comments:					Supervisor signature:
Mr. Ben: -Li	ght to make it	look softer (currently is w	hite which ma	kes it too	
	right)	× •			
		where to go for the items	(place it in are	as one would	
		earching for it e.g fork in t			
		tems not obvious when ru		r too fast	
		vel 1 is too bright		, <del>~~</del>	
	Progr	ess (please circle the fee	edback)		Date:26/02/2020
1	2	3	4	5	
F	Poor	Satisfactory	Go	bc	

		WEEK 0	8
Comments:			Supervisor signature:
		he texture ( looks the same on all	
		se an image for something further	away
- Level 2 finis	sh next week ( f	îx outside lighting)	
			Data: 44/02/2020
1	Progres	s (please circle the feedback) 3 4	Date: 11/03/2020
	oor	Satisfactory	Good
		WEEK 0	9
Comments:			Supervisor signature:
Mr Ben: -The	AI needs fixin	g as it doesn't make sense when it	can find you even
	en you're right	-	-
	ghting is okay n		
-		t really say much without test play	ving it
	inning needed i		
	ipping needed	to be fixed	
		ickly and move to level 3	
	sh up level 2 qu		Date: 18/03/2020
- Need to finis	sh up level 2 qu Progres 2	tickly and move to level 3 as (please circle the feedback) 3 4	5
- Need to finis	sh up level 2 qu	tickly and move to level 3 as (please circle the feedback) 3 4 Satisfactory	5 Good
- Need to finis 1 P	sh up level 2 qu Progres 2	tickly and move to level 3 as (please circle the feedback) 3 4	5 Good <b>0</b>
- Need to finis 1 P	sh up level 2 qu Progres 2	tickly and move to level 3 as (please circle the feedback) 3 4 Satisfactory	5 Good
- Need to finis 1 P	sh up level 2 qu Progres 2	tickly and move to level 3 as (please circle the feedback) 3 4 Satisfactory	5 Good <b>0</b>
- Need to finis	Progres 2 oor	tickly and move to level 3 as (please circle the feedback) 3 4 Satisfactory	5 Good O Supervisor signature:
- Need to finis	sh up level 2 qu Progres 2 oor	to look into it , still looks quite bi	5 Good O Supervisor signature:
- Need to finis 1 P Comments: - Level 3 scali	Progres 2 oor	to look into it , still looks quite bi	5 Good O Supervisor signature:
- Need to finis 1 P Comments: - Level 3 scali	sh up level 2 qu Progres 2 oor	to look into it , still looks quite bi	5 Good O Supervisor signature:
- Need to finis 1 P Comments: - Level 3 scali	sh up level 2 qu Progres 2 oor	to look into it , still looks quite bi	5 Good O Supervisor signature:
- Need to finis 1 P Comments: - Level 3 scali	sh up level 2 qu Progres 2 oor	to look into it , still looks quite bi	5 Good O Supervisor signature:
- Need to finis 1 P Comments: - Level 3 scali	sh up level 2 qu Progres 2 oor	to look into it , still looks quite bi	5 Good O Supervisor signature:
- Need to finis	sh up level 2 que Progres 2 oor	to look into it , still looks quite bi	5 Good
- Need to finis	sh up level 2 que Progres 2 oor	tickly and move to level 3 (please circle the feedback) 3 4 Satisfactory WEEK 1 to look into it , still looks quite bi of level 3	5 Good 0 g g

		WEEK 1	L <b>1</b>	
Comments:	Supervisor signature:			
Mr Done I aval	2 noods to	he aviably done and implement t	ha Al'ainta	
		be quickly done, and implement t fneeds to be started	ne Al s into	
-Prome	lional stull	needs to be started		
	Date: 08/04/2020			
1 Poc	2 or	3 4 Satisfactory	5 Good	
		WEEK		
Comments:				Supervisor signature:
Mr Don: Highl	ight impor	tant button in tutorial with red text		
-		(build problem)		
	-			
		h the walls and very sensitive	1 4 . 1 4 1	
		ell players they are near an object t	nat can be stor	en
	-	has no particles	·41 · 4 4	
-	-	jective menu needs to be resized w	in consistent	
perspec	uve			
	Date: 15/04/2020			
1	2	ess (please circle the feedback) 3 4	5	
Poo	r	Satisfactory	Good	
		WEEK 1	L <b>3</b>	
Comments:				Supervisor signature:
Mr Ben: Promo	materials 7	Feaser- some grammatical changes		
- Addir				
- Font f				
- Some				
- tutoria	l objective	image, grid can be seen and need	s to be remove	d.
	<b>D</b>			Date: 32/04/2020
1	-	ess (please circle the feedback)	5	Date: 22/04/2020
	2	3 4	-	

WEEK 14										
Comments:						Supervisor signature:				
Final Presentation										
	Date: 29/04/2020									
1	2	3	4		5					
Poo	or	Satisfactory		Good						