FMP

Soldier's silhouette

ASSIGNMENT BRIEF (11 weeks / 45 Credits): Unit 13 (Extended Project in Creative Media Production)

The goal of this project is to allow you to develop a chosen discipline or subject area, for instance coding, concept art, level design, etc. The Project will be broken up into **5 different stages**. **Stage 1** (**Weeks 1-2**) is when you will be working individually to extensively consider your chosen area, or discipline, that you wish to explore later on in the project. You will be expected to research into, and create, your own unique game proposal pitch based on a **First Person Narrative Driven Game.**

In **Week 3, Stage 2** is where you will be assigned to a team and to which you will **pitch** your individual game idea(s). As a team you will choose **one** of those ideas to continue with and to develop into a **vertical slice.** A vertical slice refers to a small section of a game that is fully developed in terms of the visual style, mechanics, music and sound. This is a very small section of the game - **not** a full game - just **one level** or area from a game - that is complete in terms of your narrative. It is important that at this stage of the project that you work as a team to solidify your game idea(s). Make sure each member is in-tune with every aspect of your games' design, art style, and its eventual implementation.

In **Stage 3** of the project (**Weeks 3-5**) you will be working within your team - in your specific chosen specialist area - decided at the beginning of the project. This may be the same role as you had initially chosen, or you may have decided to follow a slightly different discipline at this stage. If this is the case, be sure that you reflect on your experiences by explaining your reasons and choices. By **Week 5**, you will undertake a **Mid-Point Review**, where it is expected that you will achieve at least a **Pass** by this time.

Stage 4 (**Weeks 6-11**) is the longest stage of the project and is intended to allow you to develop and explore your skills in your chosen discipline. Your team should have consolidated their game concepts and ideas together and you should be producing your specialised work to a maximum level of skill and professionalism.

By the end of **Stage 4** (**Weeks 6-11**) you will be working towards your final pitch and presentation. You should also have play-tested your games during this stage (*possibly with students from **CGD1**), writing a report on the feedback, and debugging any errors.

Stage 5 is the final formal pitch / presentation of your game. This will be to an assembled panel, consisting of the Games Design faculty, as well as invited guests, where you will again be given feedback and critique (**approx. 27.05.22**).

Statement of intent

I will be creating a vertical slice of a First person Narrative game. At the end of this project, the game will have Complex mechanics being implemented and any bugs fixed. This relates to the Pathway specialism as it will allow me to obtain different ways to make the code more efficient and shorter. It will also help with my problem solving skills, and whilst coding itself isn't that creative, I will be able to think of a mechanic, interpret it as a flow chart, and try to translate it to a blueprint in the unreal engine, along with foreseeing any bugs or glitches in the code.

The game in question will be a survival horror, where you are a soldier who has suffered a near-fatal injury, and has fallen into a coma. Whilst in that coma, They are haunted by shell-shocked memories and the reality of war.

Statement of intent – research and influences

The sources I'll use will be various game stores to find inspirations, I will also scour the internet for various narrative games on sites like Itch.io and gamejolt. This, alongside various Level 80 articles, will be how I find out how to make the game. For the coding and any debugging, I will look at the Unreal engine forums, youtube tutorials and pull from my current experiences and proficiencies of coding.

Statement of intent – techniques, processes and timescale

With the timescale as large as it is for my specilism, I will have enough time to make a flowchart of everything that needs coding, be able to code it and debug anything. I will also avoid crunch time, and communicate to my team about certain coding aspects, if it can be done within the time frame, how it can be done in the time frame.

Most of the time will be dedicated to the Modelling and Level design, Using unreal, Blender/maya/Zbrush for modelling/retopologizing and substance/3Dcoat for texturing.

Statement of intent - timeplan

Week 1 (28.02-04.03): create the story and Research
Week 2 (07-11.03): Blockout 1st level
Week 3 (14-18.03): Blockout 2nd level
Week 4 (21-25.03): program essential mechanics (doors, Ai, pickups)
Week 5 (28.03-01.04): refine code
EASTER
Week 6 (19-22.04): Texture furniture
Week 7 (25-29.04): Model + UV furniture
Week 8 (03-06.05): Model Pickups and AI model
Week 9 (09-13.05): UV and texture Ai model
Week 10 (16-20.05): UV and texture pickup models
Week 11 (23-27.05): Implement UI and sounds
HALF TERM
Week 12 - HAND IN (10.06.2022).

Bibliography

https://youtube.com/playlist?list=PLKkxurTeOs_U3N-JG8tb_A9QnC4A9sbgC

https://en.wikipedia.org/wiki/Silent_Hill

https://en.wikipedia.org/wiki/Bendy_and_the_Ink_Machine

https://www.klei.com/games/dont-starve

https://dark-deception-game.fandom.com/wiki/Torment_Therapy

Ideas Week 1

Idea 1

You are a survivor of a Chemical attack which incorporated the use of Genetically modified Ophiocordyceps unilateralis spores and heavy amounts of cyanide. Everything around you is destroyed and zombies roam the streets. The antidote for this has it's instructions in a notebook, which must be found.

What I need to code for this is: Zombie AI, Projectiles, Zombie spawning, Disease.

Idea 2

You are in a coma. When you wake, you're in an empty Hospital, You have no memory of the event which caused it. Everything seems fake almost like a dream; the walls are alive, the floor is warm and breathing. A man approaches you, claiming he's the overseer, and that you're in his Domain. The offer he has for you is simple: Escape or become one with the house.

The hospital has many abominations that dwell within its walls, all of which are previous and personal victims of the overseer.

What I need to code for this is: creature AI, Pickups, Abilities.

Research & Developed Idea (idea 2, Week 2)

Research game 1 - Silent hill series

Silent hill is a video game franchise developed by Konami. As a survival horror game, Silent hill focuses around a small town, which the protagonists of each game visit, the town is a strange place, always shrouded in a fog, whilst it's unwilling inhabitants are subjected to horrific attacks from creatures that inhabit the fog. The creatures on based on the inhabitants Psyche.

Silent hill (1999) focuses on Harry after a vacation to the town goes horribly wrong and they end up in the town. They investigate and end a ritual to birth a god.

Silent hill 2 (2001) focuses on James sunderland, after he receives a letter from his dead wife Mary. He goes to silent hill and confronts the many horrors that are in himself.

Silent hill 3 (2003) follows Heather, a teenager who is the reincarnation of a vessel meant to birth a god, who goes to silent hill to stop the birthing of the god, in which she was successful.

The main draw is more less the mechanics and more how the narrative is shown. It is shown in cutscenes, and clues (notes, books, etc.) whilst you progress.

This relates to my game Visually. The setting of Silent hill is gritty and unnerving. Grungy walls and cages that hang on the walls, which in turn are both hallucinations, It also focuses on mentality and illness. The narrative is completely different, with the exception of one similarity. The similarity is With the place it's set in. SIlent hill has hospital sections, which is where my game takes place, The area is also living, in a sense, as of the supernatural.

Research game 2 – Bendy and the Ink machine

Bendy and the ink machine follows Henry stein, an animator and artist during the Golden age of animation (1928 - late 1960's), who goes back to his old workplace after 3 decades. There, they find the ink machine, and start a chain of events, eventually banishing a heavily demonic version of Bendy, the a cartoon devil.

The mechanics involve interacting with things, it also has AI that attacks and can die. bendy does appear to give chase, which there's also hiding spaces to stop them. They're also audio logs that give a majority of the Lore, along with some hallucination effects.

Research game 3 - Dark deception.

Dark deception is similar to pac-man, where you explore a maze, collecting things, whilst being chased by monsters. The main thing i'm looking at with this game are it's locations. One location within the 4th chapter of the game is called "Torment Therapy" which takes place in a hospital.

The hospital location starts out as more of a club, with the nurses dancing, drinks are on display and everything is rather different compared to the rest of the game, as there's no immediate threat. However as you progress, it slowly becomes a horrorland, with the nurses trying to kill you, albeit out of a justified, but sexist outlook.

The location is similar to my own. A Twisted hospital where the staff try to kill you. It is a maze to navigate and with notes to display the Lore, the pickups and the abilities you can buy.

Research game 4 - Don't starve

Mainly Due to the Sanity mechanic and UI, Don't starve is a survival game where you drop into an open world and try to survive. You have to manage Hunger, Sanity and health.

As you progress Lower in sanity, you see shadow hallucinations, which eventually can and will attack you. at night, Sanity will drain constantly.

Bioshock Document

The bioshock document is a clean, well written document, covering everything. The Mechanics, the narrative/story, An overview of everything details the basics of the game.

It has a deep discussion of the mechanics, which I will also incorporate into mine, as I am very mechanic and code heavy, as per my specialism and proficiency with coding. It still mentions the narrative loads.

Protagonist

Mirco Graves, a Resident of and Soldier in the American Military, gets put into a Coma after a Near-death experience with artillery. During recovery, He has to come to terms with some actions that happened whilst touring Iraq. His brother, Dr Michael Graves, was a Field Medic who got shot and killed From terrorist Gunfire right infront of him.

Mirco is 5ft (152.4cm) tall and weighs in at 150lbs (68kg), He has Blue eyes, a scrawnier build than your typical soldier, Brown hair and has misshapen hands due to Central polydactyly.

Antagonist

The Overseer is a manifestation of Guilt and trauma. His form varies from person to person. To some He appears as a Doctor or nurse, a teacher or a loved one. To others he appears to them as a class bully, an abusive Ex or boss, or whatever personified evil they think of.

His realm only draws the dead or Critically injured into it. This also varies between person to person. Mirco appears in a Hospital/medical tent, reminiscent of his brother's role as a medic and his title of doctor. As long as the victim is unconscious, they'll stay in there, playing a cruel and deadly game of hide and seek.

Enemies

Gatherer's (bottom left): These pale and genderless humanoids only wear a loincloth and stand at 6ft tall. They cannot see nor hear and will wander aimlessly until they touch a living creature, doesn't matter if it's flora or fauna, which they will swiftly dispatch it with large, retractable claws. They will then gather in the middle of Realm to feast. They can be fended off with Pure luck, they can't see or hear, so the player must predict and navigate around them. They will also always appear in mazes

Oveerbeast (top centre): The personal wolves of the Overseer. They always know where the player is and will slowly converge on their ever changing position. They have a heightened sense of seeing and telepathy to allow them to see through walls. When the beasts are released, you'll have ample time to gain distance. They will hunt you down for 1 minute, before they vanish for 1 minute, after which they will spawn at the overseer's position and resume their furtive chase.

Reapers (Bottom right): The creatures are Mischief incarnate. They are beings of pure smoke and darkness, who will Run around in random directions and through walls, Obscuring the area and making it impossible to see for a short time. Any light source disperses them. When not causing mischeif they don a red robe.

Overseer: The main entity of his realm. You can fend him off with Ultraviolet light or a Stream of boiling water. He Will walk slower than his Hounds, and shares their vision.
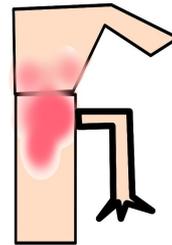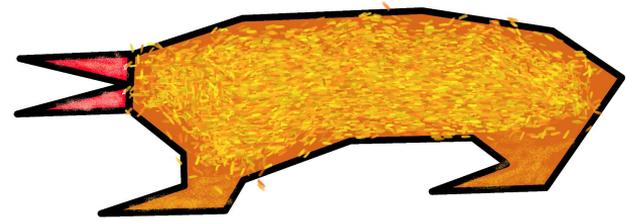
Mechanics

- Creature AI
    - Gatherer Wandering
    - Overseer And Oveerbeast Tracking
    - Reaper random movement

- Pickups.
- Points for store
- Abilities.
    - Stun
    - Teleport
    - Speed boost
    - The ability to jump

Team project

Week 3 plan

Monday: finish Documenting last week, team meeting, begin research on timelines
Tuesday: continue and finish Researching Timelines
Wednesday: Program the doors, menus, and torch
Thursday: Refine the doors and torch
Friday: Merge branch, begin documentation of the week

Needs Doing

Jumpscare type AI (done?)	Seamless corridor	Wandering/chasing AI
Keycards	sanity drops when u r afk to long	Running + climb
Doors (Keycard, Pin, Interaction)	Create object glow function (objective highlighting)	Dying
Winding Flashlight	Sanity	Get spawn point working
Lift	Lore notes	Menus
head bobbing	Crosshair	

Week 3 – Team meeting (Team name: Big Kenneth)

The group went with my idea, but with some changes, the main one was the Time period being in the early - mid 1940's, With our protagonist sustaining heavy damage from Axis (japanese) forces in the pacific theater. The protagonist name has been changed to better fit the nationality of the character.

Week 3 - timeline research

In order to make the doors, I need to know how to do timelines, and for that I turned to a youtube tutorial on the doors I want.

I need to make five doors total, one which is single and can be opened no problem, the lift door, and a set of double doors. The double doors and single doors will have a locked version.

In order to make them work, I'll need to make two custom events, which go to a do once, then a sequence which goes to a Flip flop, which will set the door to play the timeline (also set it from A to B), it will then reset the do once and reverse the animation when interacted with again, and reverts it back to A. This is for both locked and unlocked doors. The locked doors require a little bit more code, requiring a few integers and a few booleans linked up to a branch.

Week 3 - Programming
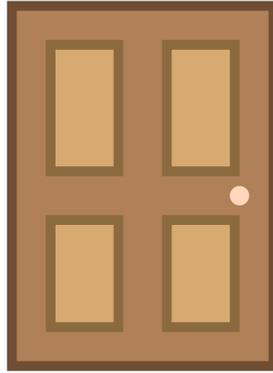
This week I did about three to four mechanics, that being:

The menus, The basics of the game have been made. I had to recode the mouse as the original Player controller for it somehow vanished.

The flashlight, which has durability, a recharge and can be picked up. I have achieved that, not with some errors. This happened Three times: one press of the recharge button made the code Instantly replenish all of the flashlights durability. This has now been resolved by making all 3 factors work on the same and boolean.

This also had a HUD Item, which will be shown off in the UI annotation

The doors. There are two types made this week: Regular ones that you can open normally, and another which require an index between keys and doors.

I was suppose to do Research on each of these mechanics, two of them I did Via planning it out like a Flow chart. The regular door is the only one I had to do research for.
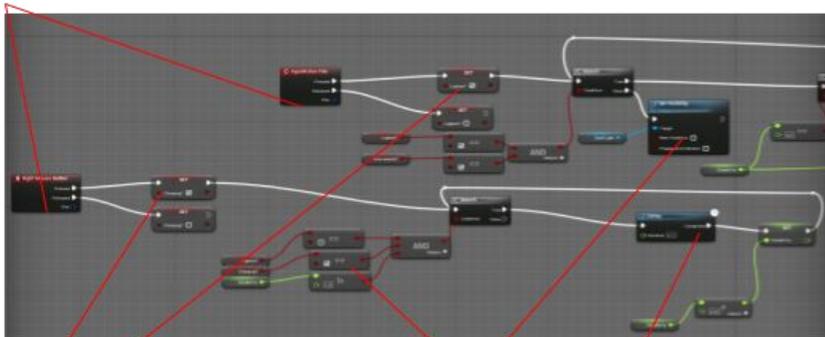
Week 3 evaluation

Week 3 was probably the most productive week as of current, as I have done a good third of what I had on my Kanban board.

I am happy with what I have done this week and will be looking forward to the next week.

I find the menu's to work as intended and the Mechanics I have coded to be smooth in their functions.

Approved/Done

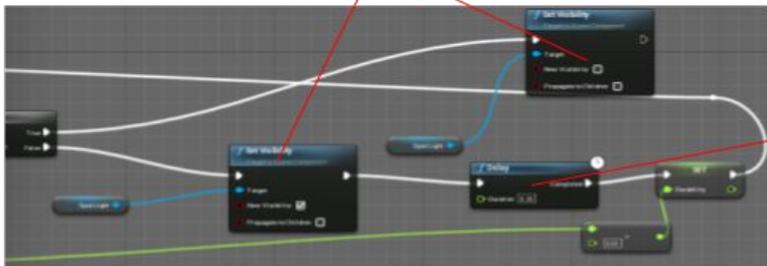| Menus | Doors (Keycard, Pin, Interaction) | Winding Flashlight | Keycards |
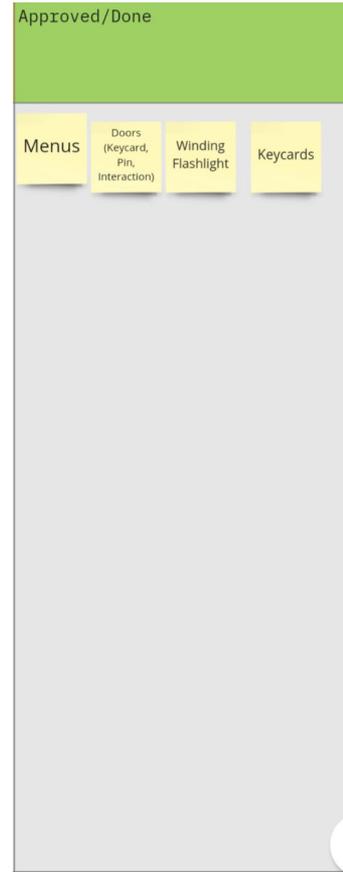
Right mouse button recharges, left turns light on/off

Toggles two booleans: Right click toggles charging

Shows/Hides torchlight

When the torch is off and Right mouse is clicked, will repeatedly charge the torch with a short delay
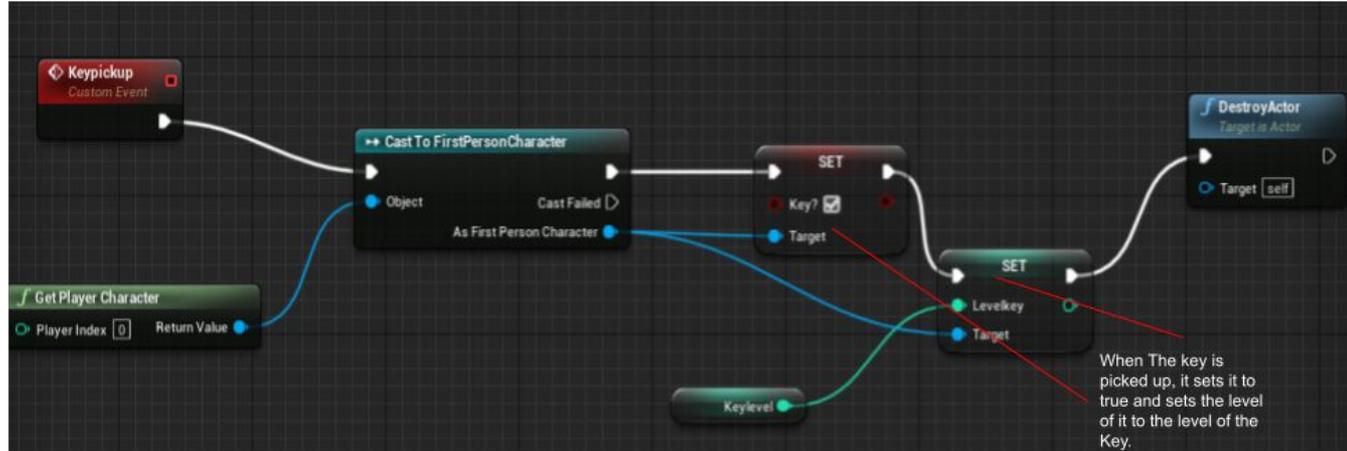
Custom event that will lead to the first person character from the torch pickup.

This boolean makes the torch function, making it visible in the players model, and allowing the player to interact with it.
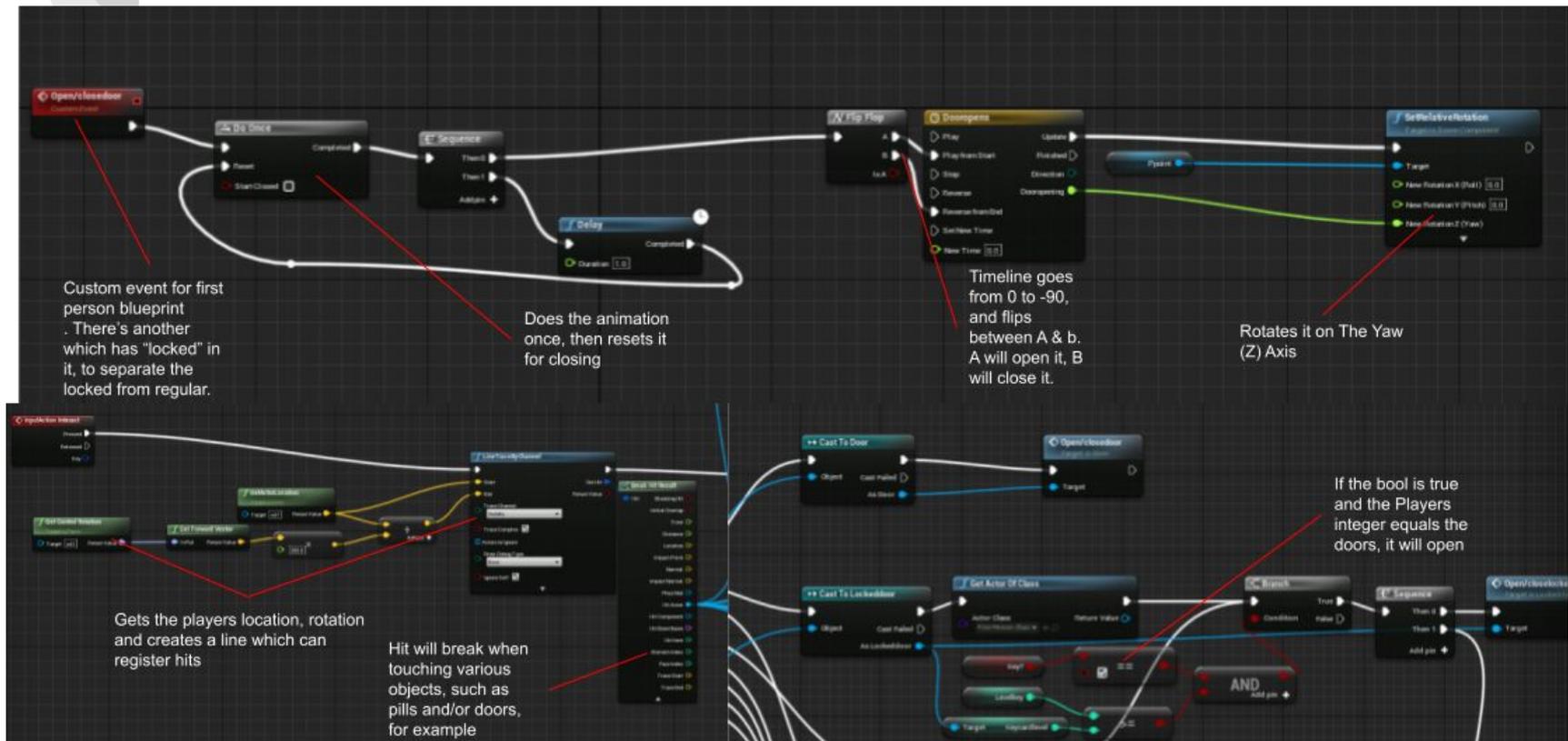
Reduces torch power.
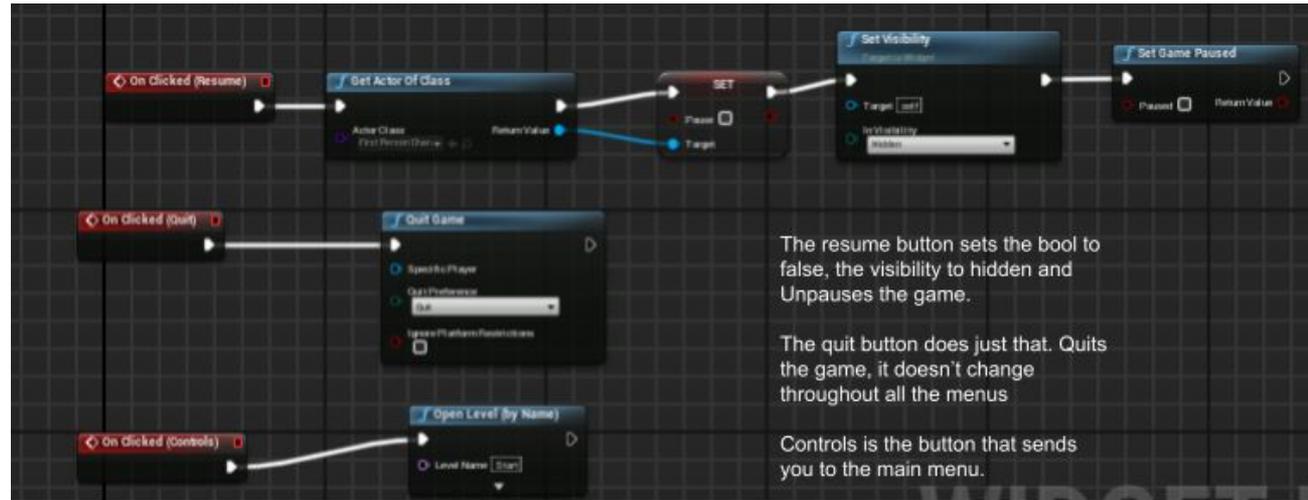
Torch code

Keys

When The key is picked up, it sets it to true and sets the level of it to the level of the Key.

This integer is especially important for all the locked doors.

Doors

Custom event for first person blueprint . There's another which has "locked" in it, to separate the locked from regular.

Does the animation once, then resets it for closing

Timeline goes from 0 to -90, and flips between A & b. A will open it, B will close it.

Rotates it on The Yaw (Z) Axis

Gets the players location, rotation and creates a line which can register hits

Hit will break when touching various objects, such as pills and/or doors, for example

If the bool is true and the Players integer equals the doors, it will open

Menu code 1 – pause menu

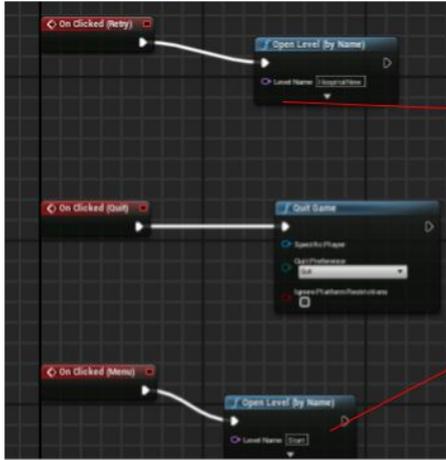The resume button sets the bool to false, the visibility to hidden and Unpauses the game.

The quit button does just that. Quits the game, it doesn't change throughout all the menus

Controls is the button that sends you to the main menu.

In a player controller, If the Key is pressed and the boolis true, it will show the mouse cursor, else it hides it.

Menu code 2 - game over menu

Send you to the start of the level

Send you to the menu screen.

Week 4 plan

Monday: finish Documenting last week, team meeting, begin research
Tuesday: Research Sanity
Wednesday: Program Sanity
Thursday: Refine Sanity
Friday: Merge branch, begin documentation of the week

Jumpscare type AI

(done?)

Seamless corridor

Wandering/chasing AI

sanity drops when u r afk to long

Running + climb

Create object glow function (objective highlighting)

Dying

Sanity

Get spawn point working

Lift

Lore notes

head bobbing

Crosshair

Team meeting - week 4

Week 4, after merging branches, there was another meeting, the map was coming together nicely and the models were slowly being implemented. My job now was to sort out the sanity mechanic and a consumable for it.

An idea of Doing Hallucinations for it also sprung up, and that aligned with my idea of a jumpscaring AI. So I got to work on that alongside it. The lift was also apart of the conversation, so that was also done.

Week 4 - research Sanity

There is a method I have found on the internet. The method requires a collision box, An array option that is tied to the actor, and two variables (floats): one to control the rate it decreases at, and the other to be the value. When the player overlaps the box, it will get the current array and add a unique value, which is then determined as either -0.1 or 0.1, and it will update and calculate it justly.

That is it for the main box, however I have gone back through and added Post processing effects, so the screen goes grey the lower the Sanity is.

Week 4 - programing
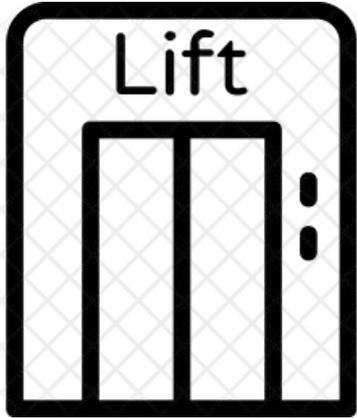
Week 4 had me Program the lift, which had problems in of itself. The lift required a door, which I tried to code in manually, without knowing that Child actors existed. The Lift door was easy, just turing the timeline of the regular door into a vector, instead of a float, going from 0 to -115. The main lift is also following a similar principle, but with a box overlap in the middle of it that when overlapped will cause the boolean to become true. When the boolean is true, hitting the lift with the line trace will cause it to rise on the Z axis.

Programing sanity, and subsequently hallucinations, wasn't that bad, however was tedious.
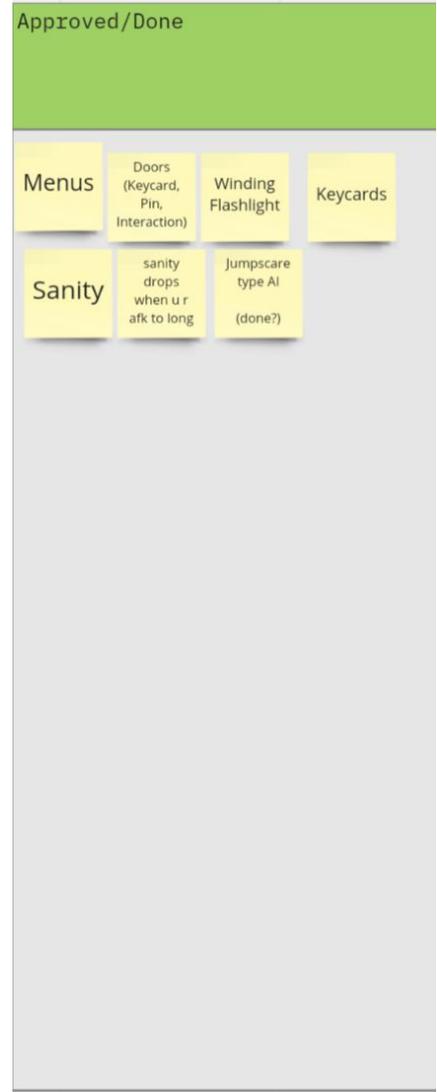
They (the hallucinations) started to spawn at the players position rapidly, and it trailed behind the player, Which caused lagging and frame rates to drop.
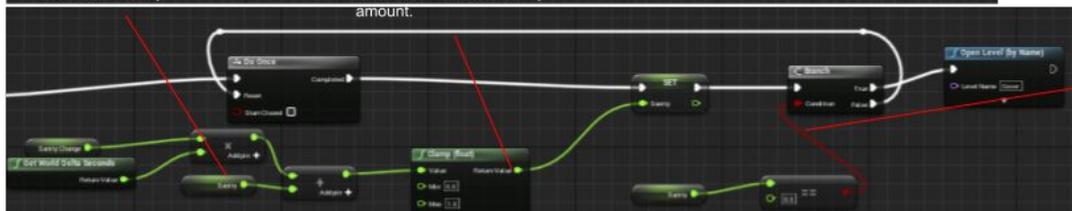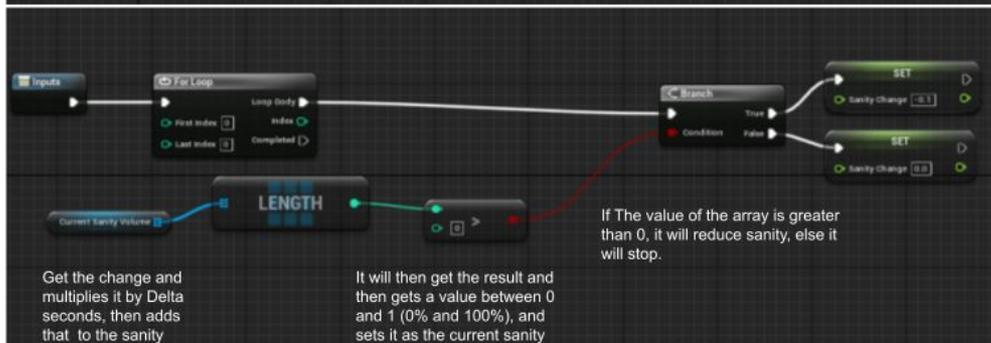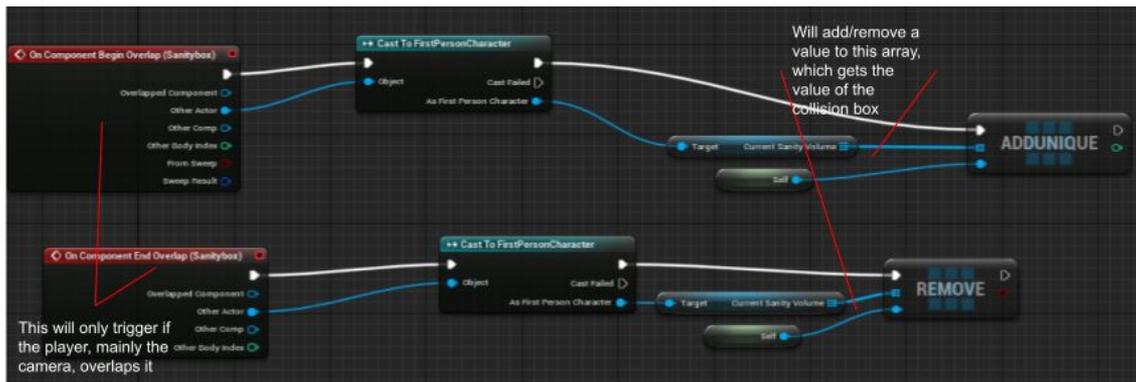
Week 4 evaluation

This week was dedicated to just one mechanic: Sanity. Despite just being one mechanic, I felt like it works as intended. However, the fact it goes off camera location and not Collision box location make fixing it a simple but tedious task.
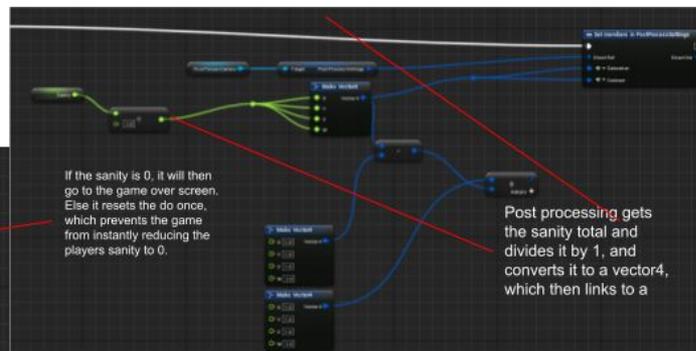
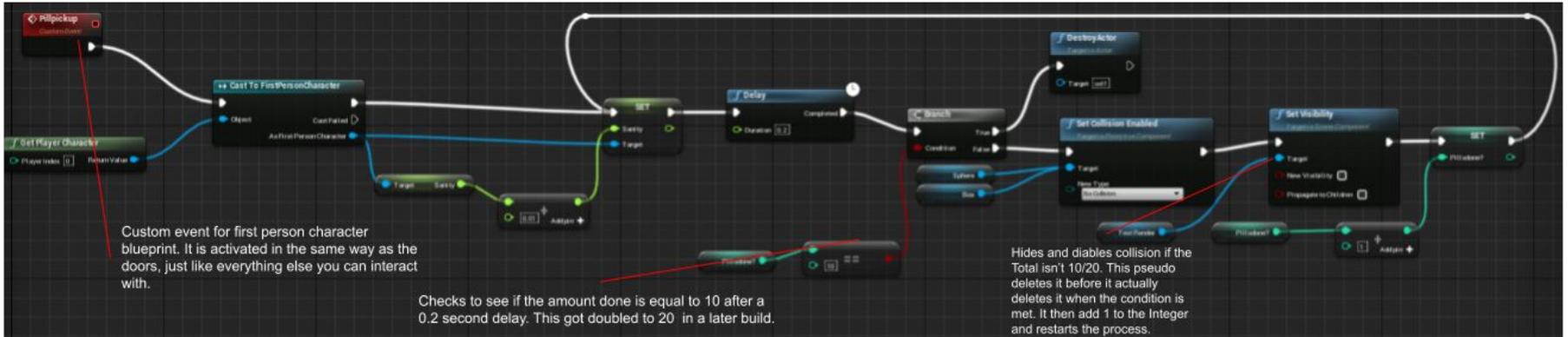Aside from that, I got sanity done, with a pickup to go along with it.

Approved/Done

Menus

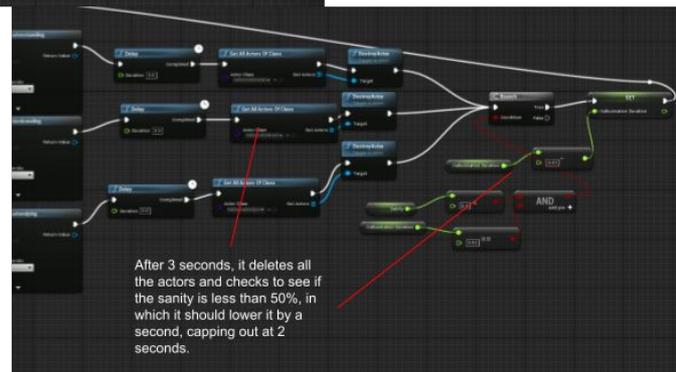Doors (Keycard, Pin, Interaction)

Winding Flashlight

Keycards

Sanity

sanity drops when u r afk to long

Jumpscare type AI

(done?)

Sanity (draining, iteration one)

Will add/remove a value to this array, which gets the value of the collision box

This will only trigger if the player, mainly the camera, overlaps it

Get the change and multiplies it by Delta seconds, then adds that to the sanity

It will then get the result and then gets a value between 0 and 1 (0% and 100%), and sets it as the current sanity amount.

If The value of the array is greater than 0, it will reduce sanity, else it will stop.

If the sanity is 0, it will then go to the game over screen. Else it resets the do once, which prevents the game from instantly reducing the players sanity to 0.

Saturation makes the screen grayer. Contrast will make the shadows more prevelent and pop out more.

Post processing gets the sanity total and divides it by 1, and converts it to a vector4, which then links to a

Sanity (regaining)

Custom event for first person character blueprint. It is activated in the same way as the doors, just like everything else you can interact with.

Checks to see if the amount done is equal to 10 after a 0.2 second delay. This got doubled to 20 in a later build.

Hides and diables collision if the Total isn't 10/20. This pseudo deletes it before it actually deletes it when the condition is met. It then add 1 to the Integer and restarts the process.

Sanity (hallucinations)

Will check to see if sanity is 50% or below, if it isn't, it will do nothing. If it is, it will do to the next piece of code.

It will then find an area inside a box around the player, which will then spawn in a hallucination.

After generating a number, it will check between 0 and 2 (max[3] -1), it will compare it to see if it's 0 or 1, and then spawns the corresponding actor.

After 3 seconds, it deletes all the actors and checks to see if the sanity is less than 50%, in which it should lower it by a second, capping out at 2 seconds.

Lift code

The code is the exact same as the Regular door, however it uses a vector instead of a float, so it moves to one side.

The lift will not reset and will only go up using the exact same method as the door, but on the Z axis.

These will help check to see if the player is in the lift, and to prevent the lift from leaving without the player

If the player has the function true, it will make the lift move, else it will only be the door.

Week 5 plan

Monday: finish Documenting last week, team meeting, begin research
Tuesday: Research AI
Wednesday: Program the AI
Thursday: Refine the code
Friday: Merge branch, begin documentation of the week

Needs Doing

- Seamless corridor
- Wandering/chasing AI
- Running + climb
- Create object glow function (objective highlighting)
- Dying
- Get spawn point working
- Lift
- Lore notes
- head bobbing
- Crosshair

Team meeting - Week 5

The team came together this week to discuss where we were heading with the game. A teammate had the Idea of a chasing Ai, who'd chase you around the map.

I also got to thinking about getting Object interaction, which was requested the other week by a different teammate.

Apart from that, I had the task of getting the AI sorted.

Week 5 - Ai research

The AI Uses two things in particular: A blackboard and a behaviour tree. I however attempted to use none of them.

To program the AI normally, I looked at some previous AI work, found a video on the AI that I used in that previous project. I then made an Ai behaviour tree and a blackboard. Putting a blackboard reference that is visible and getting a vector. On the AI it'll use, it will use an boolean and Ai perception. If the behaviour tree has detected that as true, it will get the players location, and move towards it.

My method, however, Didn't utilise these, instead using pawn sensing, a boolean and three custom Events. The first one detected where an available navigable location is, and it walks toward it. The second would find the player location and move to it. The final event would see if the boolean is true or false. If it was true, it would chase, if it was false, it would go to a random location.

Week 5 - Programming

I held up off on the AI for the meantime, that seemed like it would get tedious after awhile.

I did however sort the Interactions and the hallucinations. To resolve the problem, I have added a do once to the code and a delay with the duration of 8 seconds.

The interactions required a hitbox which, on overlap, will display a rather large E. For the locked doors, it is a similar principle, however if it doesn't meet two separate requirements, it will display a massive red X instead.

I also managed to code the notes, which will only activate on a hit. When they do receive a hit, it will check to see if a bool is true, if it is, it will then create a HUD, hide the actor, and if the ID number is equal to a certain value, display something on the note.

Team meeting 2 - week 5

At the end of the week, The main concern was the Narrative. We have the slightest Idea on it, however we just need to refine and expand on it. I will be mainly sorting the Hit registration of the pickups, as currently the hit reg is a bit janky.

Week 5 evaluation

This week was substantial in the development of the game. The narrative element can now be implemented into the game. However, this didn't come with some drawbacks:

The Ai needs to be done, after doing the Interaction, I realized that it will most likely be moved to the HUD, however that can't be done until the rest of the main mechanics are added.

Notes

Creates a HUD of the note, and add it to the player's view
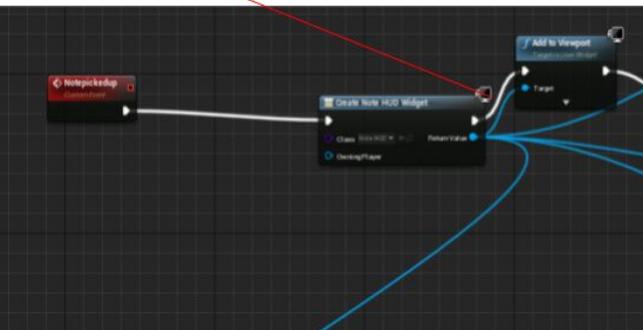
It flip flops between hiding the note HUD and showling the note HUD

On hit, if the bool is true, it will display the note with a custom event, else it sets it to true for the player to try again and succeed
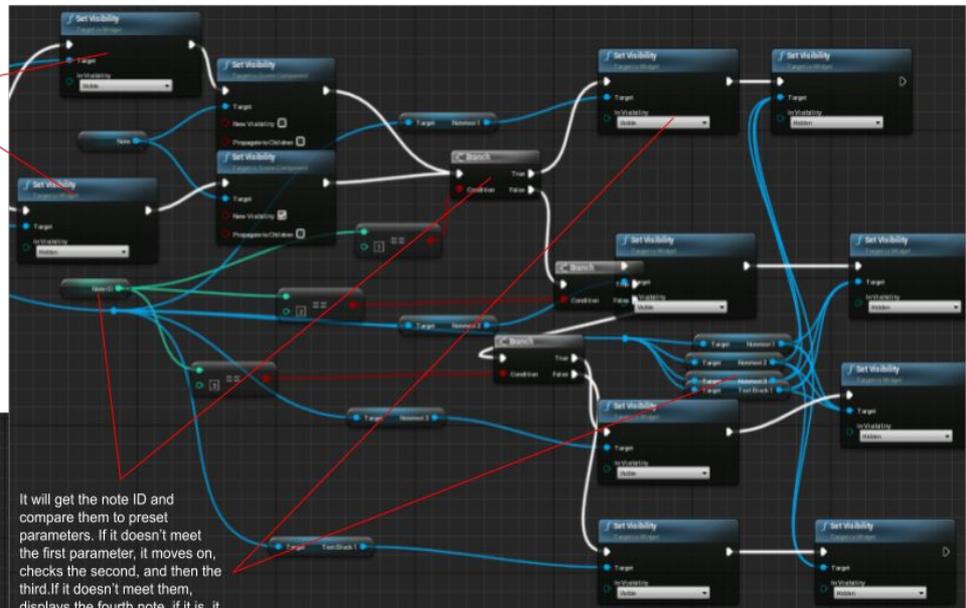
It will get the note ID and compare them to preset parameters. If it doesn't meet the first parameter, it moves on, checks the second, and then the third.If it doesn't meet them, displays the fourth note, if it is, it will display the corresponding note, and hides the rest.
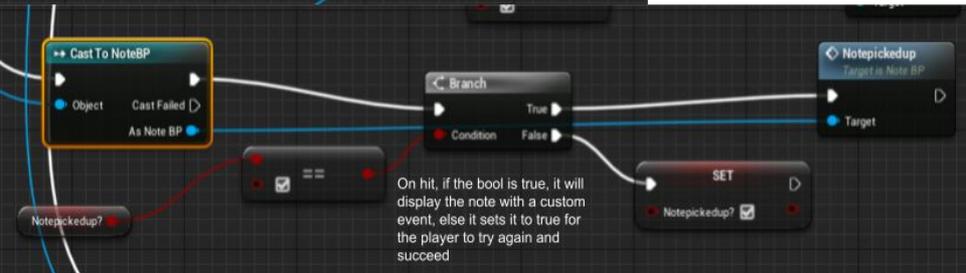
Interaction text (iteration 1)

Locked door interactive text. It will Hide both the E and the X.

If the player's key level is equal to the lock's level and they have a key, it will display the E, else it will display an X

Note interactive text. Ending overlap will also hide the HUD and make the note visible

On overlap with a collision Box, it will display the E. ending it hides it.
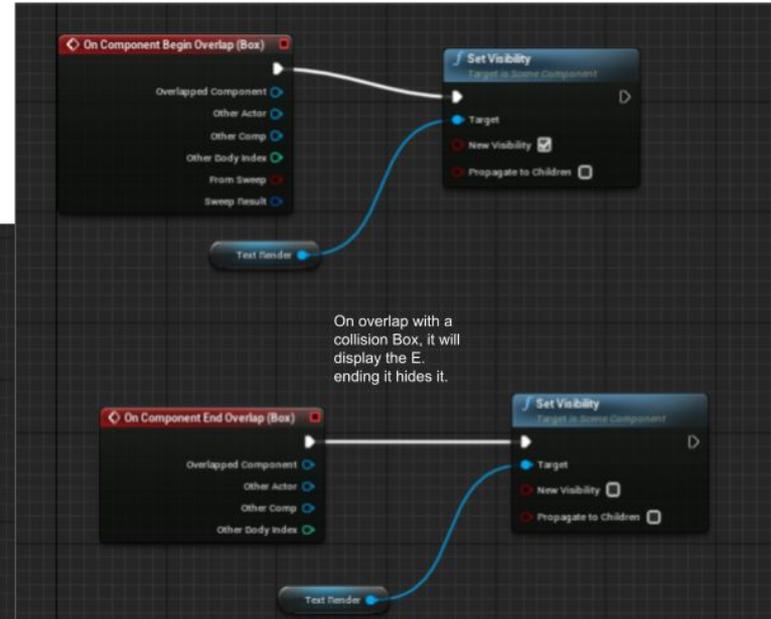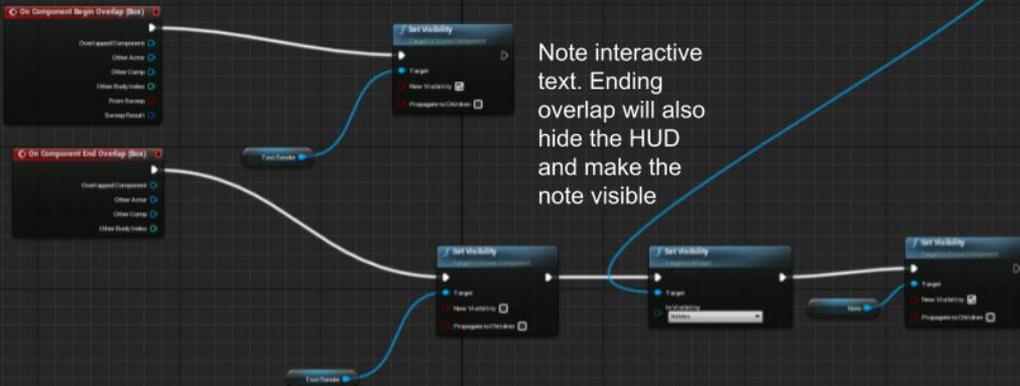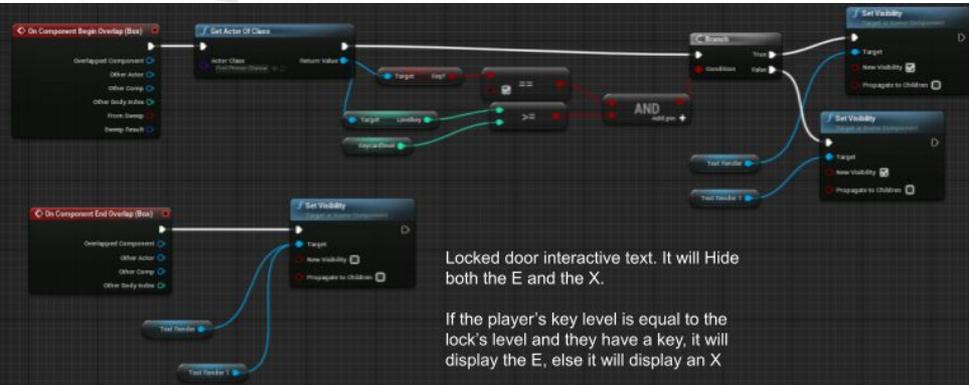
Week 6 plan

Monday: finish Documenting last week, team meeting, begin research. Peer review.
Tuesday: Research Spawning the Ai
Wednesday: Program The AI spawning
Thursday: Refine the code
Friday: Merge branch, begin documentation of the week

Seamless corridor

Wandering/chasing AI

Running + climb

Create object glow function (objective highlighting)

Dying

Get spawn point working

head bobbing

Crosshair

	Grade	Comments	Reviewed by - (Enter Name Here)	PEER ASSESSMENT

Context
(How well do they understand the brief and its requirements?)

P

Your week 3 was fine but needs some photos and research

Research
(Is the research relevant and ongoing?)

P

The research is relevant to some slides but need more

Planning
(Is there a weekly plan and how effectively is it shown?)

R

Need to show weekly plan and then go in depth

Technical Skill
(How well are their skills documented, what level of expertise does their work show?)

P

This would be a merit if all your weeks were documented as looking week 3 was fine

Problem Solving
(Is there any evidence that they have overcome a technical or creative issue, if so how well is this documented?)

R

You tell us that you have fixed something but you don't go into any detail about how you have fixed

Presentation
(How well is their documentation and final outcome presented?)

R

Very plain and many empty slides

Evaluation
(Saying how you've done something is not an evaluation and liking or disliking something is only the beginning of an evaluation, do they explain why?)

R

Lack of constant evaluation

	Grade	Comments	Reviewed by - (Steven Pope)	PEER ASSESSMENT
Context (How well do they understand the brief and its requirements?)	P	Need to go over the brief again and see what you need to do.		
Research (Is the research relevant and ongoing?)	P	The research is detailed But needs a lot more.		
Planning (Is there a weekly plan and how effectively is it shown?)	R	Need more detail in planning but good start.		
Technical Skill (How well are their skills documented, what level of expertise does their work show?)	P	Just need some more context on most slides then it will be a merit.		
Problem Solving (Is there any evidence that they have overcome a technical or creative issue, if so how well is this documented?)	R	No Tellings if problems occurred and no how you prevented them or solved them needs to be added		
Presentation (How well is their documentation and final outcome presented?)	R	Empty spaces quite dull needs images and text.		
Evaluation (Saying how you've done something is not an evaluation and liking or disliking something is only the beginning of an evaluation, do they explain why?)	R	Not really any evaluation needs to be added.		

Team meeting - Week 6

This standup, for me, was mainly about smaller, less important coding, such as radio's and sounds. This however doesn't mean I'm not given some big tasks, such as the lore notes, and making them work is going to be especially tedious, despite me basically already knowing how to code it. I also need to do the AI, as I have been putting that off.

The AI will work in a similar way to Ink bendy from bendy and the ink machine. During chapter 3, he will periodically spawn and roam around the area, the main difference will be if you get far enough away, he will lose track of the player, rather than hiding makes his lose track.

Week 6 - Research Ai spawning

The main thing about this is The Ai needs to spawn either with the controller or a behaviour tree.

With the controller, it will just need to spawn the actor when it meets a condition, which will be the sanity hitting 0, and goes away when the sanity is hitting 50%+. The code to spawn it won't be the problem, but despawning it.

That is something I will need to figure out, but for this week I will focus on just getting it to spawn.

Week 6 - programming

This week I have gotten the Ai code to move, chase, spawn and be a genuine threat to the player as it can open doors and knows where the player is. I have also given it a red light. Aside from that, I felt like nothing got done but that.

I also had to rework the sanity mechanic, as the code decided to brake. Instead of draining sanity, it started to drain health.

Week 6 evaluation

I agree with the peer review, there isn't much in terms of images/videos and is very empty, however I can grab the images I need next week.

For code, I am happy with what I have done, however the health drain I have decided to code, but not ask for it to be implemented, so by all accounts it is scrapped.

The Ai works relatively smoothly, however the fact it didn't work for a good 4 days really irked me. I should've gone with the behaviour tree and blackboard, as trying to get it to spawn and despawn was arguably the most trouble I have had with this project.

Approved/Done

Menus

Doors (Keycard, Pin, Interaction)

Winding Flashlight

Keycards

Sanity

sanity drops when u r afk to long

Jumpscare type AI (done?)

Lore notes

Lift

Wandering/chasing AI

Get spawn point working

Scrapped

Health drain box

Ai movement and collision boxes (iteration 1)

If the player is in the lift and the Ai cannot detect the player, it will find a random location, if it can it will begin to chase.

It will find a location and move to it, before going back to checking the parameters

When inside a box around it, it will set the boolean to true and make the actor faster. Leaving the box reverts it to false and set the speed back to the original.

If the pawn notices the player within sight, it will activate the senses and start to move it will only do this once.

If the player overlaps the box directly surrounding the Ai, it will set the Health to 0 and send them to the game over screen.

Ai Interaction (iteration 1)

The Ai will always check for Doors, as the code is always active

The Ai will get it's location and rotation, converting the rotation into a Vector, then creates a line which can activate hit events.
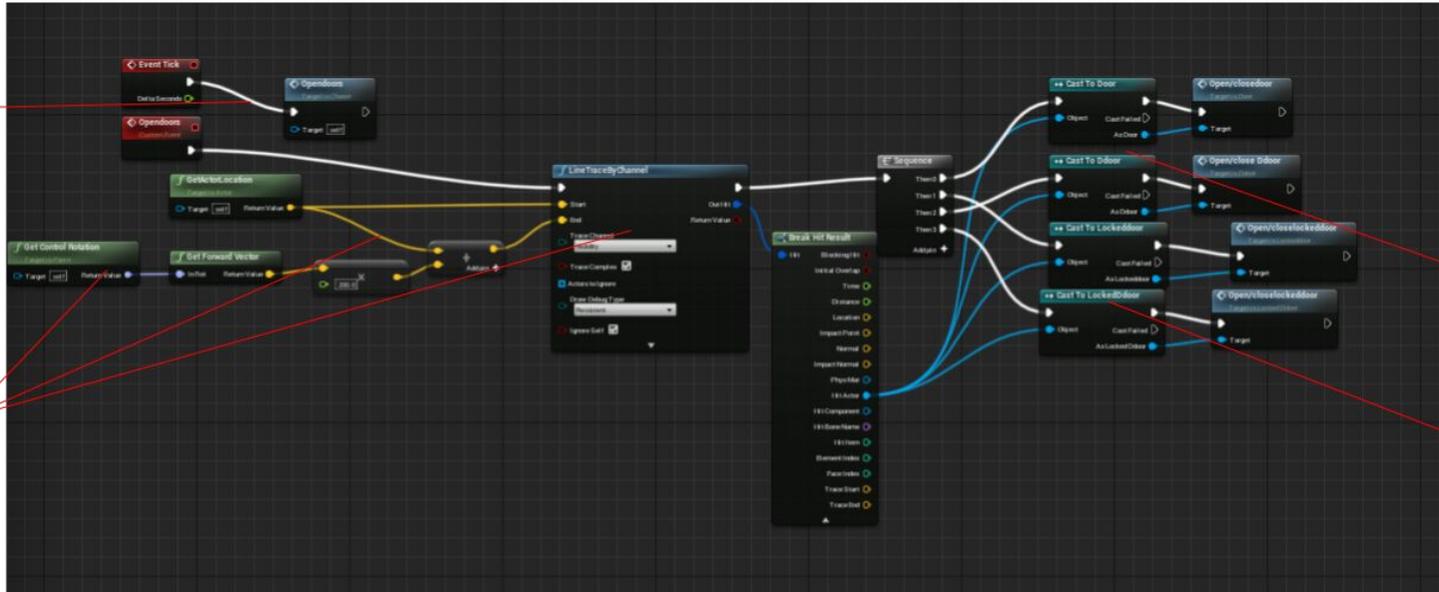
It only needs to open doors, locked or not, so the method is exactly the same as the players, just only for the doors (except the lift)

Spawn Ai (iteration 1)

It would get the Ai spawn actor's location and create the actor, which would then get the controller for it

This wasn't implemented yet, however it would cause all the Ai's that spawned to despawn, then reset the perception.
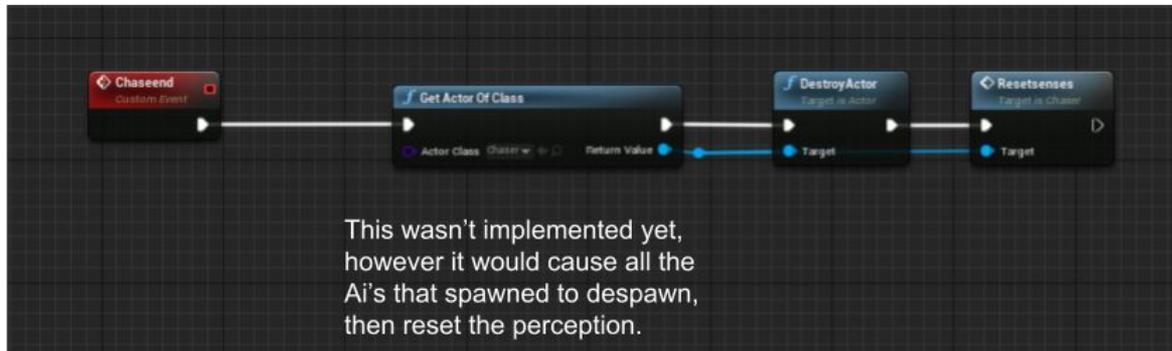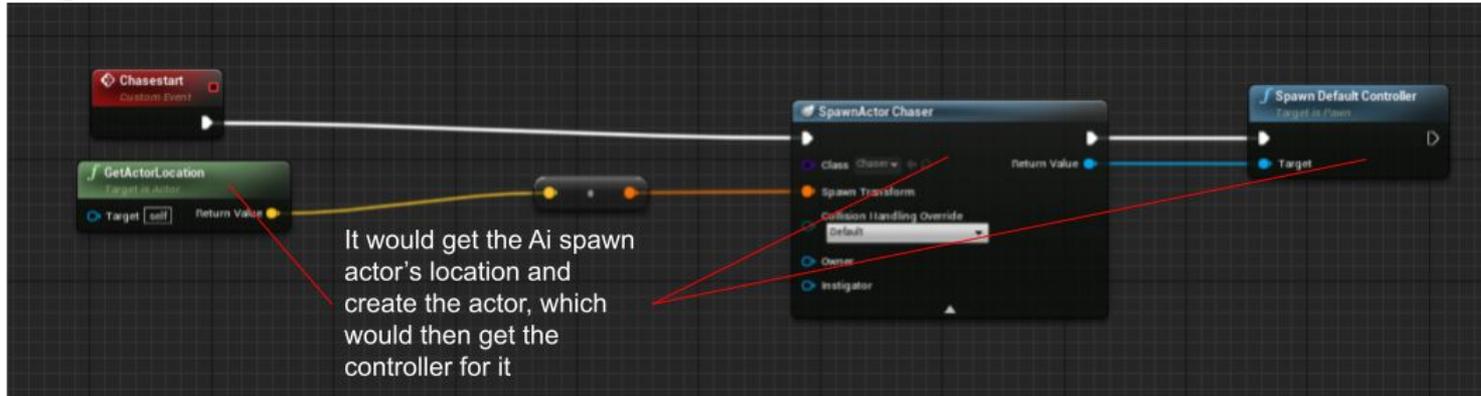
Spawning Ai (bugged)

OLD

New
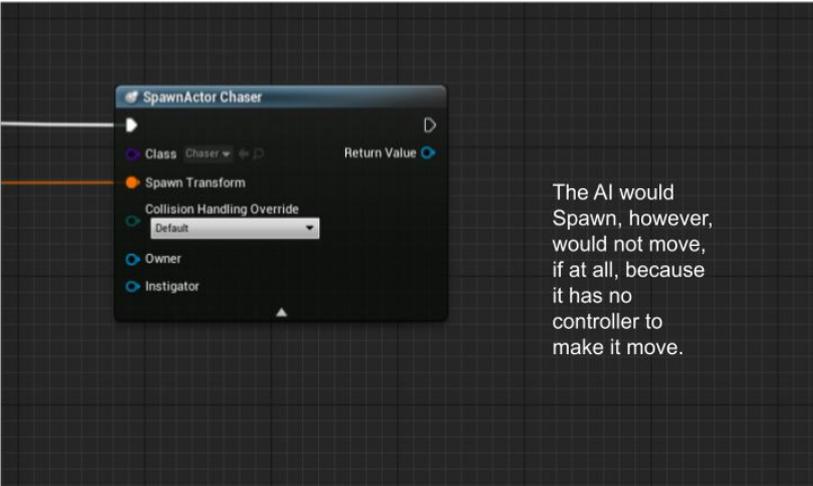
The AI would Spawn, however, would not move, if at all, because it has no controller to make it move.
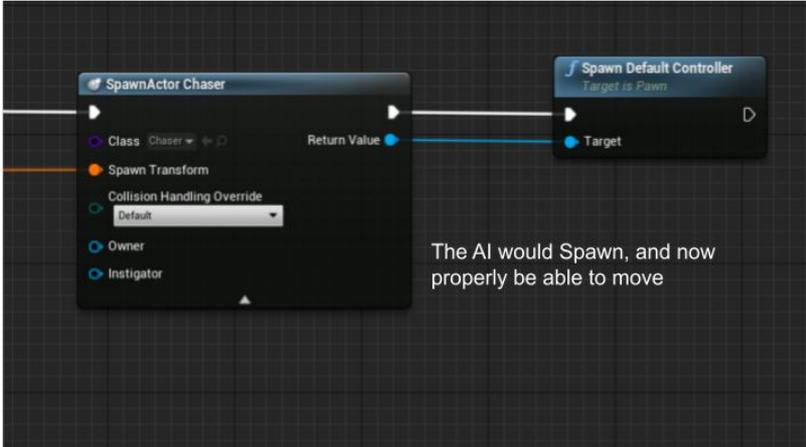
The AI would Spawn, and now properly be able to move

Week 7 plan

Monday: finish Documenting last week, team meeting, begin research
Tuesday: Research animations and spawning
Wednesday: Program animation and spawning
Thursday: Refine the code
Friday: Merge branch, begin documentation of the week

Needs Doing

Seamless corridor

Create object glow function (objective highlighting)

Running + climb

Dying

head bobbing

Crosshair

Research - Animation and spawning AI

Spawning the AI is a rather complex challenge, considering the Place of where it spawns will normally be behind the player. To spawn the AI, it will just need one small amount of code. However, despite it only needing to be a small amount, it will need to be In a behaviour tree with a blackboard, meaning I had to reprogram the entire AI to sort this.

To spawn it in, I would need to have a branch that detects if the Sanity is 0, when that happens, it will spawn the Ai with the Behaviour tree attached to it, and then check for other parameters to say otherwise, such as the players sanity being and/or above 50% or if the player is touching hitbox around the AI.

Week 7 - programming

There was no Team meeting for unknown reasons, I got down to programming. There was an unimplemented mechanic for a seamless corridor, which functioned as a teleport. When the player touched something, it would send them to a box that is hidden.

I also programmed the newer iteration of the interaction system, which is then expanded on in later weeks, however for now it was just the one phrase: "Press E to interact"

Week 7 evaluation

Week 7 I felt like it didn't have much going for it. The most I have done this week was bug fixes and moving the interaction text to the HUD, which was an even more tedious task than the AI and hallucinations.

Two Mechanics got scrapped: the infinite corridor would be abysmal to sort out, as I no longer have time on my side, so that was scrapped, along with sorting out a glowing texture. The glowing texture was originally intended to be for items as a highlight, but again, die to time constraints, I had to lay that off.

Scrapped

- Health drain box
- Create object glow function (objective highlighting)
- Seamless corridor

Approved/Done

- Menus
- Doors (Keycard, Pin, Interaction)
- Winding Flashlight
- Keycards
- Sanity
- sanity drops when u r afk to long
- Jumpscare type AI (done?)
- Lore notes
- Lift
- Wandering/chasing AI
- Get spawn point working

HUD and interactions (interactions iteration 2)

Whenever the player picks up the torch, it will show the UI progress bar and some text.

This text is taken out of the Game after the UI elements were added.

The UI for the interact is with this small piece of code. Which will display it if the Boolean is true.

Consumables check if the First tick has happened, if it has, it will set it to false. With that exception, exactly the same as the rest of the code.

Most of the code to enable the interact message is like this one. When the Box is overlapped, it sets the bool to true

Seamless corridor

The Event hit happens when the player walks into the door, which will get the door and then the exit.

When it gets the exit from the entrance, it will teleport the player to the exit.
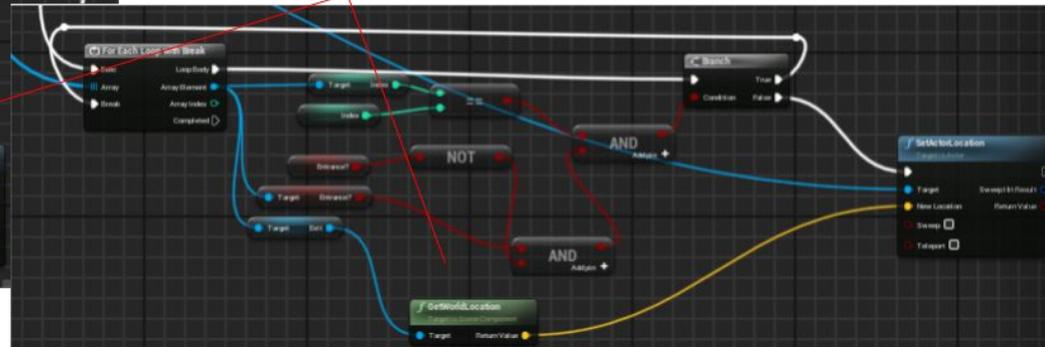
Animation
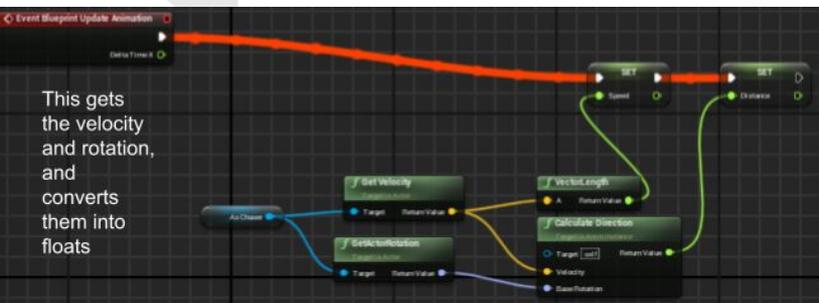
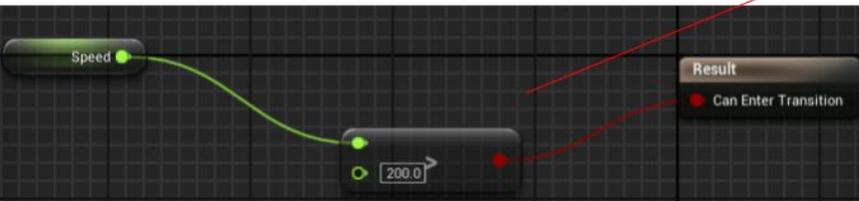This gets the velocity and rotation, and converts them into floats
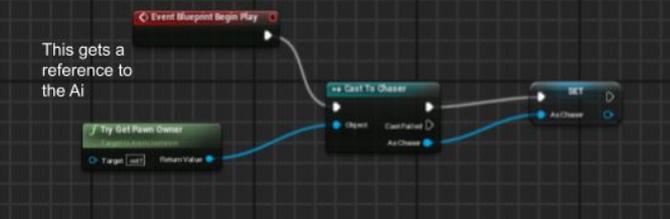
This gets a reference to the Ai
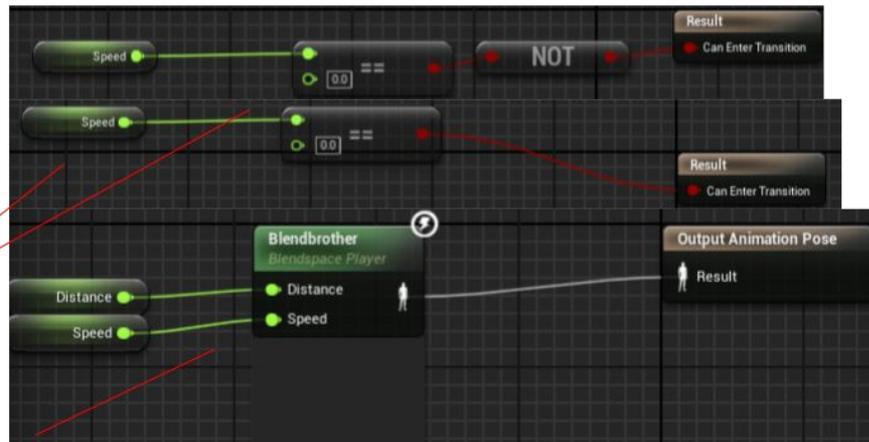
This gets the distance and speed, and plays the correlating animation:

0: idle
1 - 199: walking
200+: running
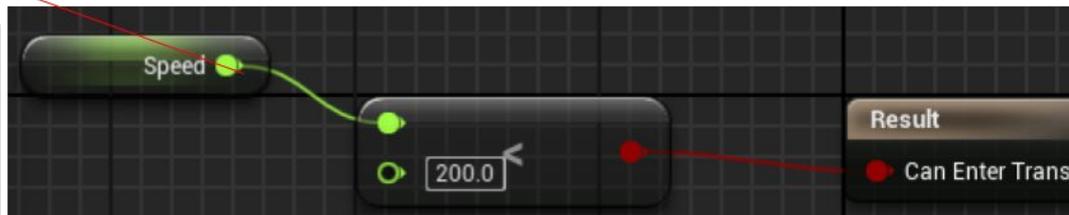
Week 8 plan

Monday: finish Documenting last week, team meeting
Tuesday: Program Headbob
Wednesday: Program Tutorial in main menu
Thursday: Refine the code
Friday: Merge branch, begin documentation of the week

Needs Doing

Running + climb

Dying

head bobbing

Crosshair

Week 8 - team meeting

For week 8, The team meeting was mainly about the smaller things, such as Head Bobbing and small quality of life changes, Such as making the pause key escape. There was a bug with the last build, which didn't give the player any controller, thus allowing them to fly and no-clip through the map.

Week 8 - programming

There was an issue on wednesday where I merged The Main branch into the branch I was suppose to merge, in which I reverted the changes. Doing so pushed the code back a week, The Ai reverted to the previous version, the Level design got pushed back a slight bit. I also coded Headbobbing, which had to be reimplemented, along with adding the custom UI for the light, sanity, health and Key's. I have decided to do the Tutorial next week.

Overall, nearing the end of this project, I have done a substantial amount to where I feel comfortable with the final product.

Week 8 evaluation

Aside from the merge mishap, I am glad the game is almost at it's conclusion.

Having to recode everything in such a small time frame really put the pressure on as I entered a small amount of crunch time, which wasn't the best decision, however, I had gotten the headbobbing in, all that was left was some of the smaller things, like sounds and UI.

Approved/Done

Menus

Doors (Keycard, Pin, Interaction)

Winding Flashlight

Keycards

Sanity

sanity drops when u r afk to long

Jumpscare type AI

(done?)

Lore notes

Lift

Wandering/chasing AI

Get spawn point working

Dying

Running + climb

head bobbing

Ai and spawning (iteration 2, Ai)

If the Sensing bool is true, it will begin to chase, otherwise it will roam
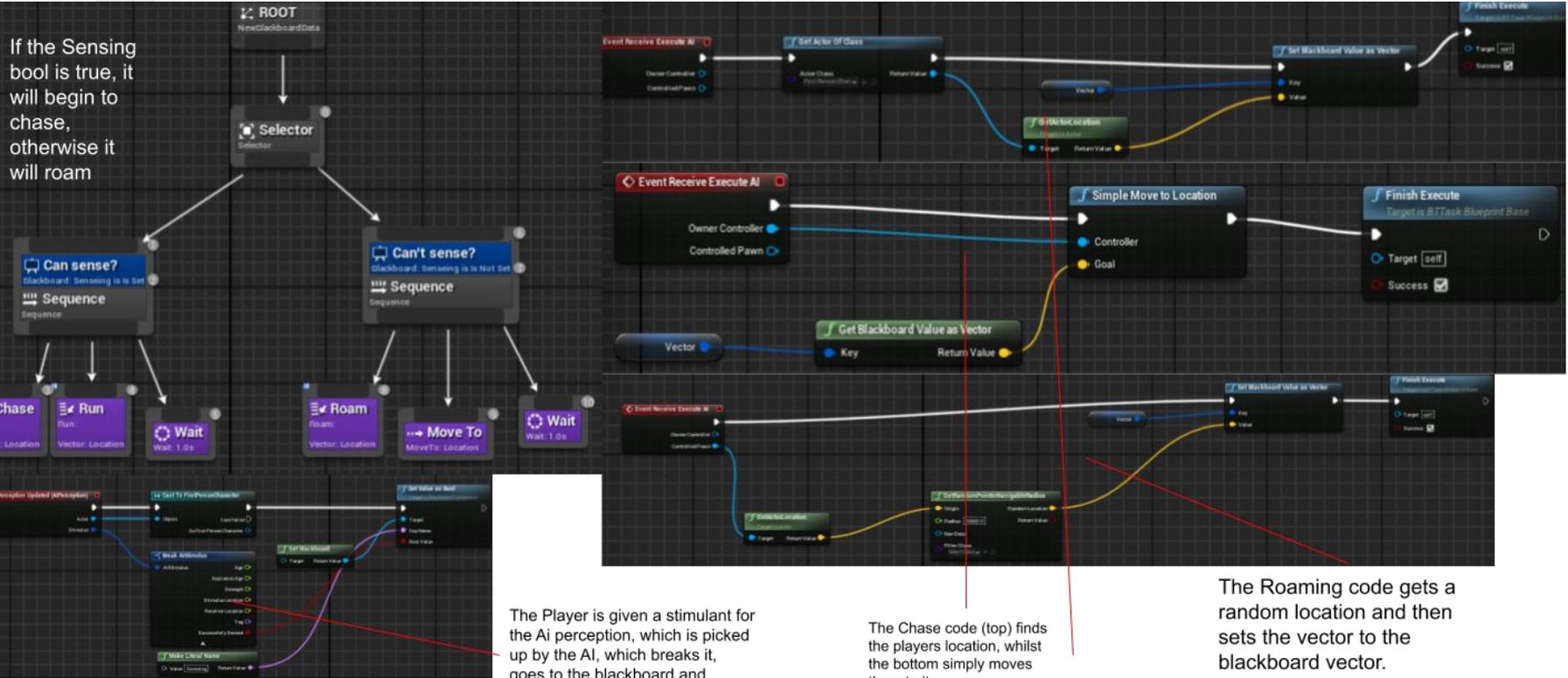
The Player is given a stimulant for the Ai perception, which is picked up by the AI, which breaks it, goes to the blackboard and changes the Boolean to true/false

The Chase code (top) finds the players location, whilst the bottom simply moves them to it.

The Roaming code gets a random location and then sets the vector to the blackboard vector.

Ai and spawning (iteration 2, Ai spawning)
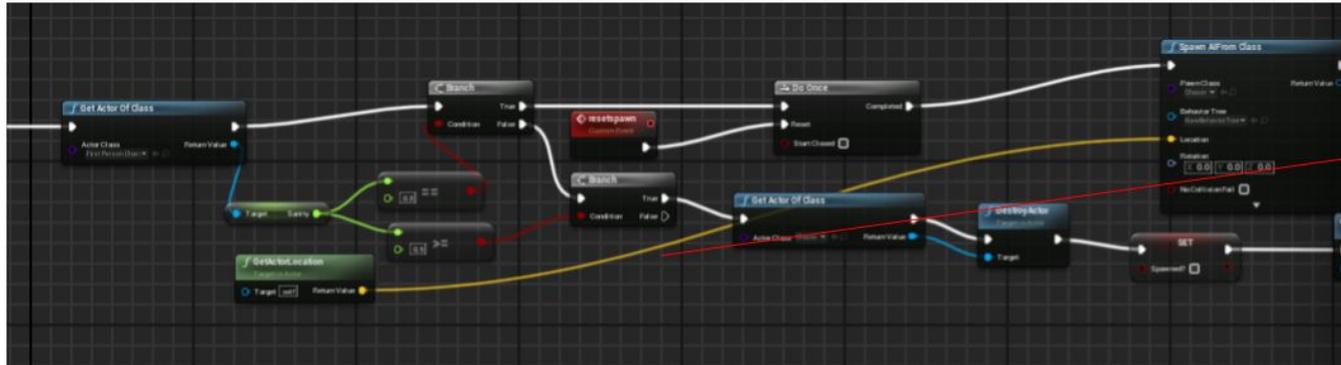
It gets the players sanity. If it equals 0, it spawns the Ai with the Behaviour tree. If it's false, it will check if the sanity is 50% or above, in which it deletes the Ai, resets the spawn condition and the chase music.
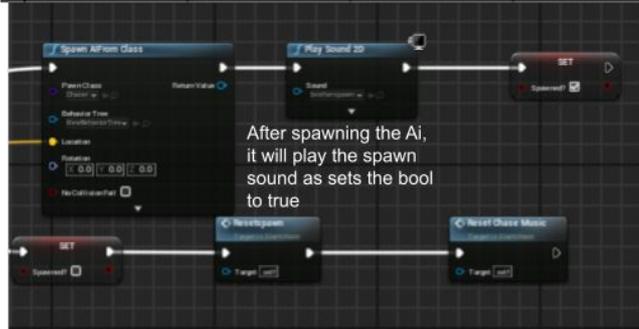
After spawning the Ai, it will play the spawn sound as sets the bool to true
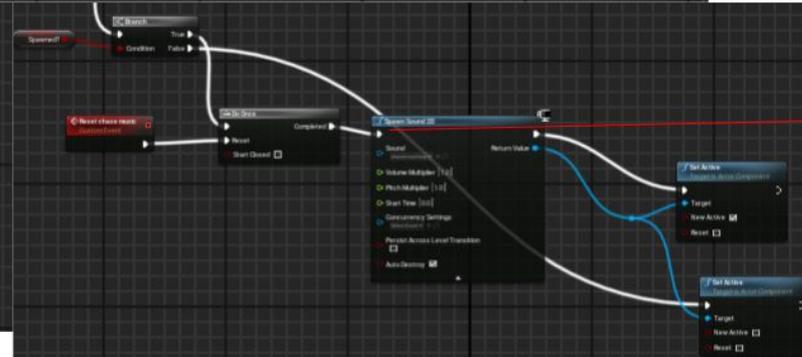
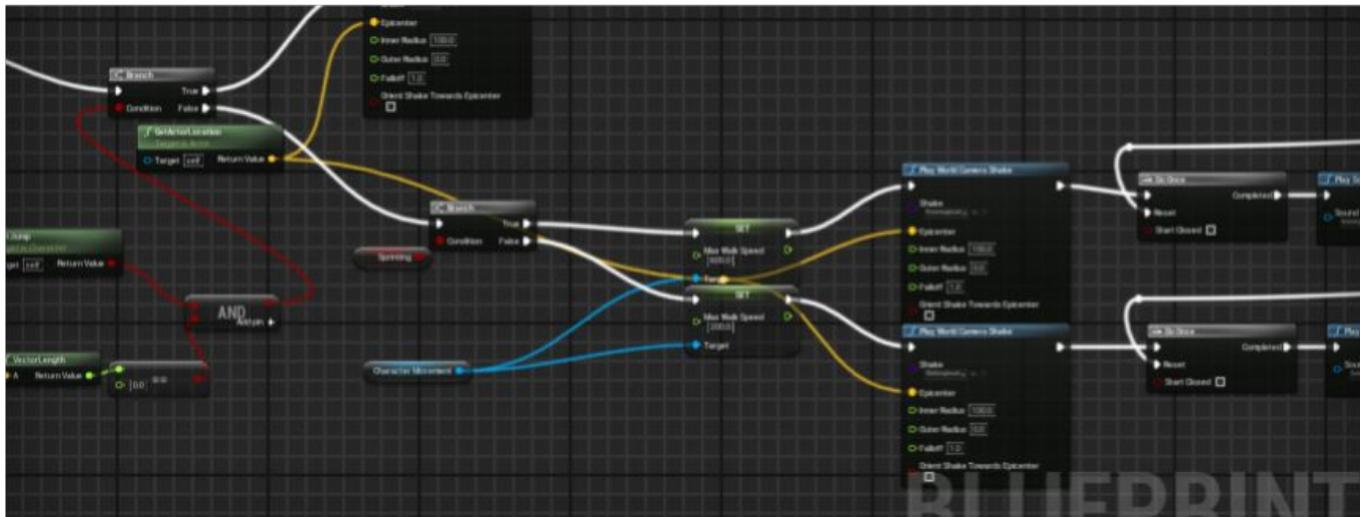If the Bool is true, it will spawn the sound, and set it to active, else, it disables it.

Headbob

The player get a condition ,which will play a different headbob:

Velocity 0 and can jump: gets idle.

If sprinting: running headbob

If walking: walking headbob.

Week 9 plan

Monday: finish Documenting last week, team meeting, begin research, have playtests
Tuesday: research and program menu screen, adding in crosshair
Wednesday: Refine the menu screen
Thursday: Refine the entirety of the code
Friday: Merge branch, begin documentation of the week

Needs Doing

Crosshair

Week 9 - Team meeting

The team meeting was shorter, and more focused on getting the Playtests sorted. It didn't feel like there was any meeting, however the main thing was to get the game built and get feedback from that.

When that was done, Sort anything and everything that was off concern, most of which will be code based.

Week 9 - programming

I programmed the Tutorial on tuesday, which had me create a custom UI element for it.
The Ai wouldn't move on the second floor, so i got a Nav mesh on it, so it now works, Music
was also implemented, with the Ai chase theme being able to be toggled on and/or off when
it spawns and despawns.
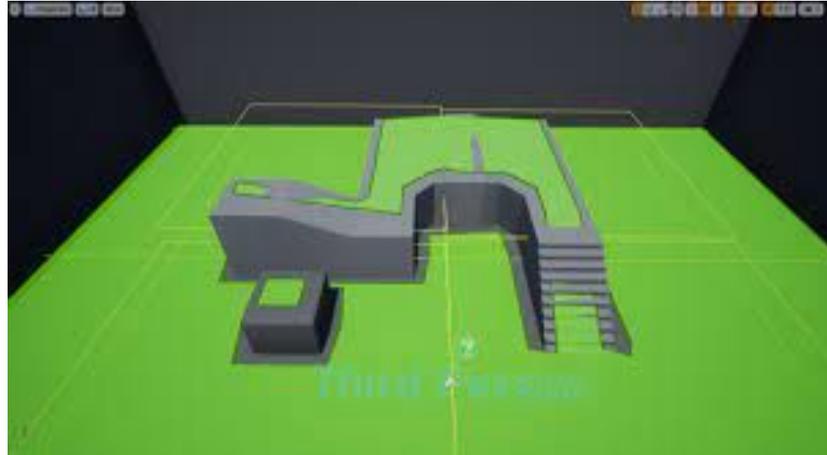
# Week 9 evaluation

Little was done this week.

All the code was working smoothly and there was almost little to no bugs. However one thing I did notice was the AI was activating the Sanity drain, and also the health drain when I tested that. I can't fix that now due to only a fortnight being left. The AI also wouldn't notice the player. Aside from that, the complete product was done.

Approved/Done

Menus

Doors (Keycard, Pin, Interaction)

Winding Flashlight

Keycards

Sanity

sanity drops when u r afk to long

Jumpscare type AI

(done?)

Lore notes

Lift
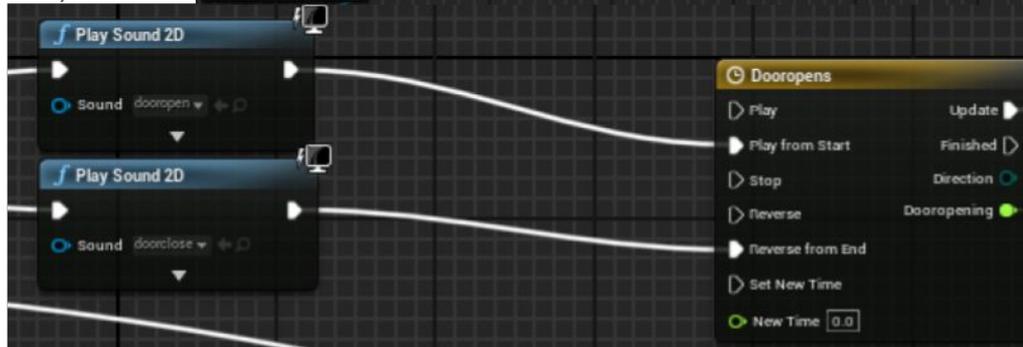
Wandering/chasing AI

Get spawn point working

Dying

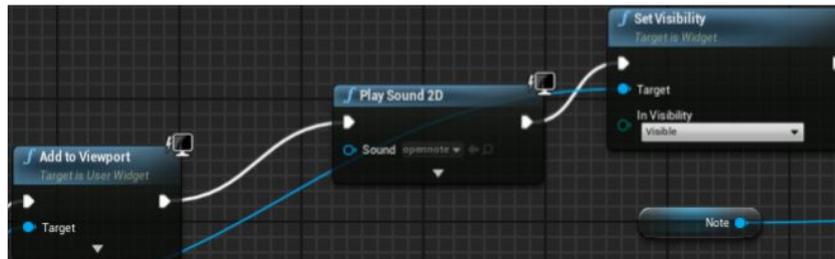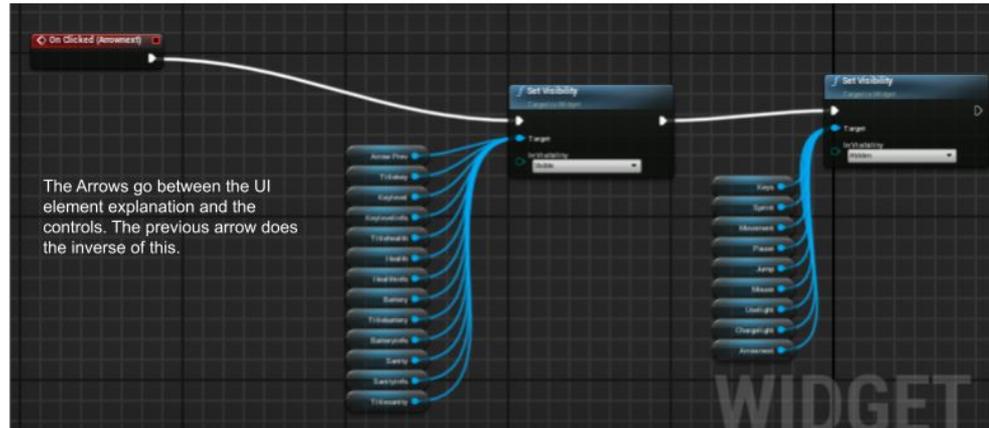Running + climb

head bobbing

Crosshair

Sound
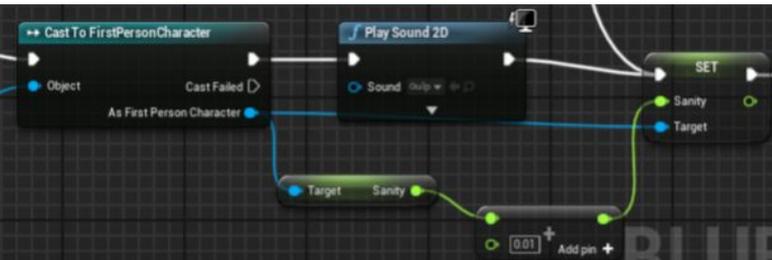
Most of, if not all of these are Extracts of already existing code, that plays a sound.

Top left is the sanity regain, bottom left is the key, Top right is the Note and bottom right is a double door (this goes for all doors)

Tutorial code

The tutorial hides everything when the back button appears

The controls are shown on the main menu when the controls button is pressed

The Arrows go between the UI element explanation and the controls. The previous arrow does the inverse of this.
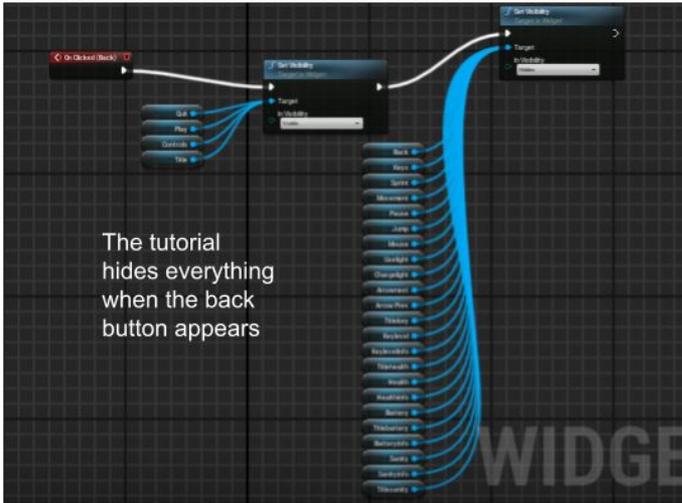
PLAYTEST FEEDBACK

	Rating	Comments	PlayTest by - (Steven Pope)
Stability/Performance (How well does the game run?)	4	Could be smoother than it is but pretty clear and i know what i was pressing ang doing, no lag	
Lighting/Visuals (The quality of the lighting, does it complement the environment?)	3	The lighting was good is made the player navigate through the asylum could add more cinematic lighting to make the place more terrifying	
Scope (Is the scope of the project to ambitious or not enough?)	2	This was a very good idea, the ambitious was there at the start but i think you had lost it and you could of done so much more.	
Player Pathing (How clear is the path through the level, was there any confusion?)	3	There was a slight confusion in the middle but lighting did get me through the game just could add better pathway but it was pretty clear where to go	
Gameplay (Was it fun/engaging, was the challenge level adequate?)	2	There was no horror or scares, not much of a challenge because you can just take pills all over the place for the sanity to go up, it was fun but could be more interesting	
Bugs/Glitches (Were there any bugs you found while playing?)	2	There is the mouse bug where its suck on the screen so i had to click to go back in, and dont understand the sanity very much.	
Other Comments	2	Would ADDDDD MORE HORROR AND STORY TO THE GAME IT WAS VISUAL THAN GAMEPLAY.	

Reflection on Feedback

This is fair feedback. The project could've required more ambition, however that then opens up to overly ambitious. I also agree with the horror aspect of it. There was very little, and there was no stakes, as the player can just pick up pill whenever they wanted to, making the AI, and subsequently the hallucinations, pointless. The visual aspect of it was also the main thing. It felt more like an interactive art piece than an game.

Rating System 1 = Poor - 5 Excellent

PLAYTEST FEEDBACK

	Rating 3	Comments	PlayTest by - Joshua Birchall
Stability/Performance (How well does the game run?)	4	The game runs fine, there were no performance issues even when in the red dog particle. All was well	
Lighting/Visuals (The quality of the lighting, does it complement the environment?)	4	The lighting was used to great effect here. I do believe you've used it smartly whether that was showing an objective or something you need to read. It also helped to show where to go or hinted too danger etc	
Scope (Is the scope of the project to ambitious or not enough?)	3	The game is very short, granted it is a vertical slice there wasn't any horror factors apart from a man sleeping in a red light. I think the scope was reasonable but there's little content	
Player Pathing (How clear is the path through the level, was there any confusion?)	3	The path wasn't too confusing - There's only a set amount of places to go and the lighting really does help. It's pretty decent.	
Gameplay (Was it fun/engaging, was the challenge level adequate?)	2	Going to be honest there was little content - there was no horror aspect and the whole game was really just following notes. I know theres stuff in there thats hard to happen - like when you lose your insanity a man chases you, other than that theres a distinct lack of content	
Bugs/Glitches (Were there any bugs you found while playing?)	3	You can NOCLIP through the doors other than that pretty bugless	
Other Comments		Its a cool game with a really interesting idea - I like the fact you're your own enemy. Insanitys a cool concept and honestly i'd make it harder.	

Reflection on Feedback

Also another fair set of feedback. The game is short and with little content, but I found the content to be a higher quality, however that can be personal bias.

You cannot noclip through the doors. I have tried to do that several times and only found it on one door, which pushed you up against the wall if you stood directly infornt of it.

Aside from that, same thought patterns as the last review.

Rating System 1 = Poor - 5 Excellent

PLAYTEST FEEDBACK

	Rating	Comments	PlayTest by - (Enter Name Here)
Stability/Performance (How well does the game run?)		Lots of screen tearing, maybe look at your v-sync settings.	
Lighting/Visuals (The quality of the lighting, does it complement the environment?)		Great use of lighting to guide the player in parts. The post processing effect attached to the sanity mechanic was interesting.	
Scope (Is the scope of the project to ambitious or not enough?)		I feel like this is an achievable project.	
Player Pathing (How clear is the path through the level, was there any confusion?)		I picked up a number of keys I was not able to use. The elevator could do with some better framing. No context around which keys do what.	
Gameplay (Was it fun/engaging, was the challenge level adequate?)		I appreciated the ambience and tone. I felt engaged but there was a clear lack of context around what this place is and what I am doing here. The design language was really well implemented so far.	
Bugs/Glitches (Were there any bugs you found while playing?)		N/A	
Other Comments		A little more focus on communicating what our mechanics do and the effects they have on the player. Some more narrative context is required to help onboard me to my characters story.	

Reflection on Feedback

The tearing and V-sync were much appreciated, as it has happened multiple times and I didn't know how to resolve it.

There was confusion with the UI and the doors, which has inspired me to make a tutorial page on the main menu.

I will also agree that the Narrative was sloppy at best, and blatantly without context in other parts. This was my first attempt at a narrative, and after multiple takes of the story, I felt burnt out and couldn't really make it a proper narrative.

Rating System 1 = Poor - 5 Excellent

Week 10 plan

Monday: finish Documenting last week, team meeting, Do a video interview
Tuesday: Research the tools, purpose and how to create a pitch
Wednesday: Begin my sections of the pitch, add images to my slides
Thursday: Document
Friday: Present pitch

Week 10 - Team meeting

I had Coronavirus this week, so I couldn't be there for the pitch. However I did my research, and everything for creating my pitch slides. As a team, we broke it down into 2 slides/person, and as the programmer, I got the main mechanics to do and the game description.

That was the primary goal now: to get the Pitch done.

Research - Pitch

The point of this pitch is to see if the game will get funded. A pitch will require Detailed Business plans, It also needs to be memorable and interesting enough to be considered for funding.

The pitch I am making is not only a group effort, but needs to have an equal balance of down to the point details and Rememerbility.

Game Description
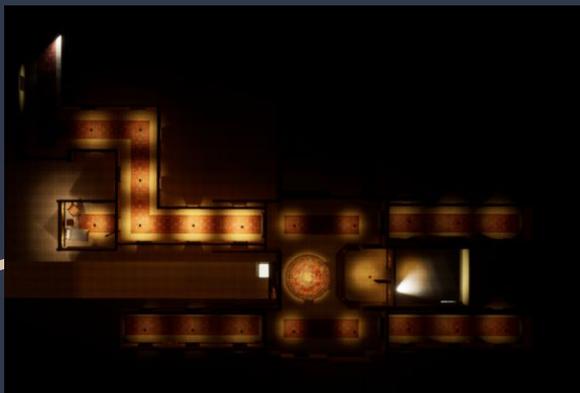
Soldier's silhouette is a survival horror game where you play as a world war 2 soldier. Whilst recovering, the soldier wakes up in a hospital building, where their goal is to escape.

During your escape, your grip on reality starts to unroll, and you get more lucid, seeing your brother around the place, standing or dying, he even wanders the halls, looking for you.

The only objective is to escape and make a full recovery.

Game mechanics
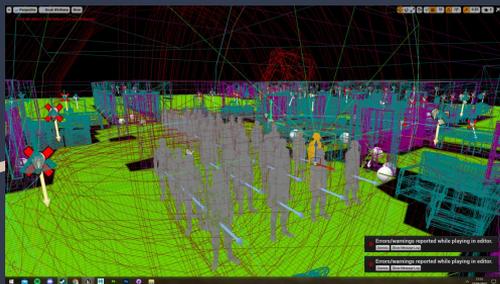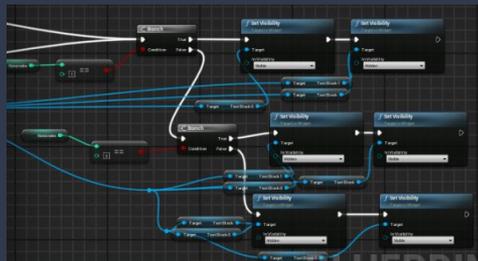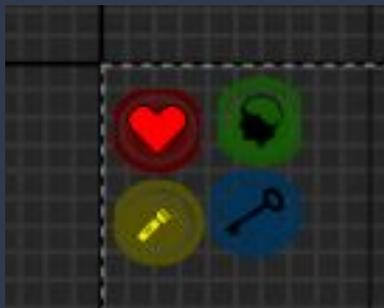
The core mechanics are focused around exploration and resource management. One important mechanic is sanity, which slowly ticks down by 1% – 3%. Overtime, combined with special collision boxes that rapidly drain the player's sanity. When it reaches 0, an Ai spawns to hunt down the player, until they get to a higher Sanity (50% or higher), which is accomplished through pickups, or get caught, resulting in the end of the game.

This is to add some stakes to the game.

Other mechanics include a flashlight to light the up dark paths, Pickups (Pills to replenish sanity, medkits to restore health, keys that access doors to more of the level, etc)

Week 10 evaluation

Whilst the pitch did get done, I couldn't be there to see how it went, due to COVID. However the project is done, the pitch was presented.

All that was left is to document the final things (some annotations, and two videos: a mechanicz video and a Commentary video.)

Aside from that, the project was complete.

Compilation of all the mechanics working

Video commentary

Overall evaluation

Overall, I felt like I was definitely engaged and had the most responsibility in the project, as the game wouldn't be a game without me.

Communication wise wasn't so bad, however when there was miscommunication between teammates, it did felt slightly more devastating the more weeks went by. The project/breif was achievable, however the scope felt really small and some days I felt almost useless, as I was that effective at coding.

If I were to do this again, I would widen my scope, figure out a proper narrative and have way more horror than before.