DEVIL WORSHIP HOTEL
LEVEL DESIGN OVERVIEW

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I.   INTRODUCTION

The player is a woman that was staying a night inside an hotel but wakes up because of strange noises in the hallways. But the hotel is desert, and weird things are appearing when the shadows rise.

Occult forces are awakening and will try to get the player. She will have to escape the hotel.

Figure I - In-game hallway

Additionally, this level was designed as a short vertical slice, we wanted to make it bigger but have to cut down the size to be able to deliver it in time. This will explain the introduction of new mechanics on the second floor that will appear only once.

With that work we wanted to create a base to build lot of various levels.

II.   LEVEL OVERVIEW

A.   Context

During the night, weird events are happening inside the hotel and wakes up the main character that decide to take a look of what's happening. But it appears that the hotel is completely desert and **sinister event**s happen when the shadow come.

For now, the narrative background of the main character isn't settled. The first version of the game, it was a girl that were investigating and trying to get proof of the presence of a demonic cult inside a school, but now it's a little different.

B.   Mission

The player has to **find a way out of the hotel** while evading the dark forces in the hallways and accessible rooms. To reach her objectives she will have to find keys to access different rooms that will lead him to the exit.

During the missing, the shadow will rise and reveal the dark forces: **dangerous cultist** that will comes out of the shadows to try to catch her.

Figure II - Exit Path of the game *(staircase door)*

C.   Narrative Beats

Inside the level, various item will give a few details of the hotel's lore and actual events:

- **Runes**: They have a signification that will lead the player and makes him understand what's happening in the current space these runes are.
- **Frame**: The frames will display certain times old room of the hotel with strange sacrifice set up.
- **Remnant sounds**: Some of the "scary" sound event will have scenarized dialogue of an event that has happened in the past inside the hotel.

D.   Dev Note

We noticed a major issue in the level design that has a huge effect on the final quality render: the metrics we made to have a coherent render has the effect to almost be the double of normal ones *(and it wasn't necessary)*, this led to increase the resources needed for the computer to run the game, even if we are happy with the current result and performances, it's a side that could be greatly improved.

Since the storytelling of the main character isn't developed at all, the player won't be able to emotionally attach to her and will result in feeling less emotion of fear. *(No strong stakes while playing)*

Known bugs:

- For no reason, the green key can disappear from the key index of the player, making him unable to open the staircase and stuck him inside the floor 1. *(Happened 1 in 100 launch)*
- The Elevator ring bell while the first floor is changing phase can sometime play twice.

E.   Art Direction

For this game we are heading the art direction as it was a **horror movie**, to drive the player's feeling toward a **continuous tension**, from the sound to the picture. We also want to make the global aspect as realist as possible, using the Unreal Engine 5 Lumen abilities of indirect lighting and a lot of texture that are "photorealistic-like" *(It's not photorealist texture used in the process, but we wanted something really close to them)*.

1.   Sound Design References

For the sound we are thinking about *Psycho* from Hitchcock: in short words, we want to get the same ambiance as old horror movies in term of sounds. They use that sound when they have peak scenes with the knife.

Figure III - Psycho Shower Scene

a)   Breathing sounds

For the breathing sounds we took as references common women sounds we see in movies while they are running away: we needed a **sound of a scared & breathless woman**, to instinctively raise the tension of the player while he starts to use the sprint.

For the monster we chosen a deep and low breathing, with the reference of the film: *Halloween* (1978) J. Carpenter.

Figure IV - Halloween (1978) Breathing sound Video

b)   Environment sounds

Whispers near the glowing runes doesn't have a particular reference, it come from mostly film that want to enhance the **paranoia feeling** of the character when making them hearing lot of voices inside their mind and then affect the viewer.

Adding these sounds to the glowing runes effect for a demonic style effect.

The Random Sounds Events are mostly driven from background sounds we could here from **haunted house** movies, like rumbles from above floor, to give the feeling something is above you while the environment is desert, ghostly breathing, or voices, …

c)   Doors

The **squeaky door sounds**, come from many films reference, but here we keep *Psycho* from Hitchcock, the sound of the squeaky door is here to **tense up** the viewer/player.

Figure V - Psycho, squeaky door sound

2. Visual References

For the global visual reference, we tried to have the same style of the **Stanley Hotel**, the hotel that has inspired the movie *Shining*, by S. Kubrick.

a) Hallways

We want a global ambiance as for the sound as the image to be close as possible as the game *Silent Hill* P.T.
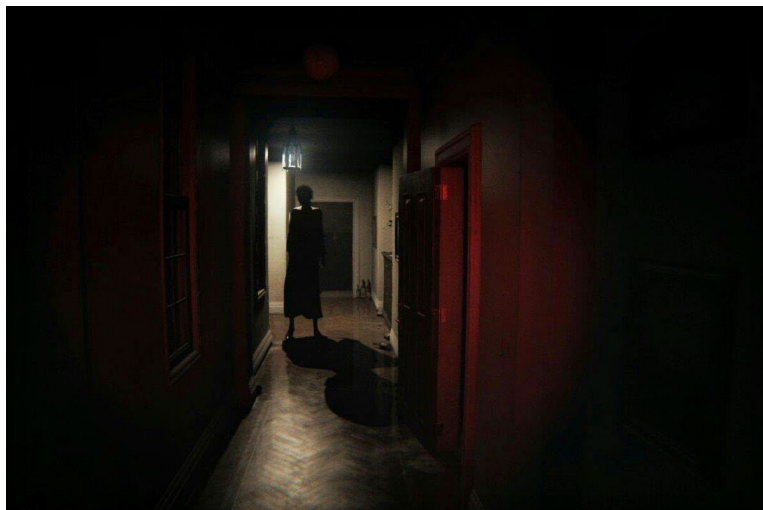
Figure VI - Silent Hill P.T

This game translates good feeling of tension for the player through low lighting, shadows, small space covered by the "enemy" body, etc. And this is something we're aiming for inside our school level.

And again, as main reference the Stanley Hotel hallway that also have in common **narrow hallways**.
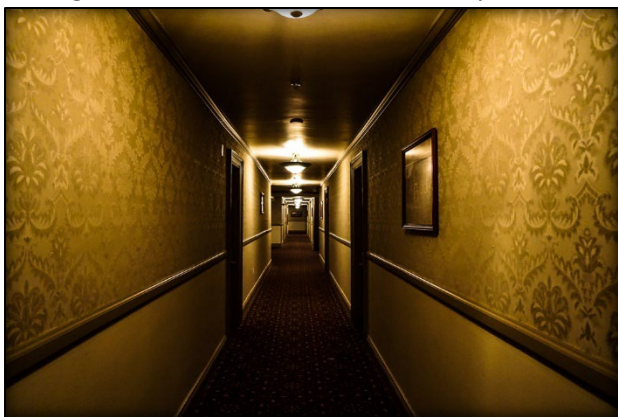
Figure VIII - Stanley Hotel Hallway
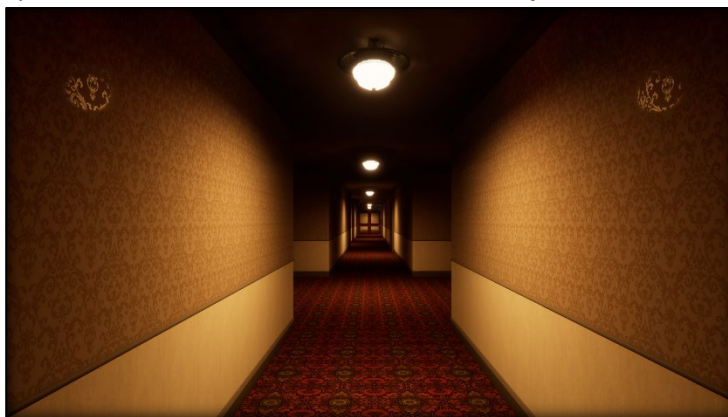
Figure VIII - In-game Hallway

b)   The stairs

For the stairs we also try to be as close as possible of the hotel reference, but in our case they were sideway staircase and not main ones that are at the middle of the building.
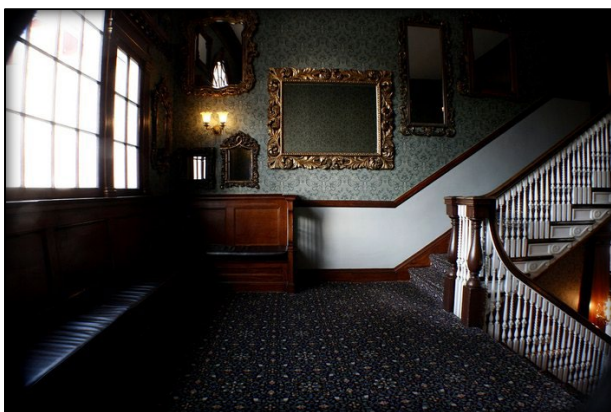
Figure X - Stanley Hotel staircase
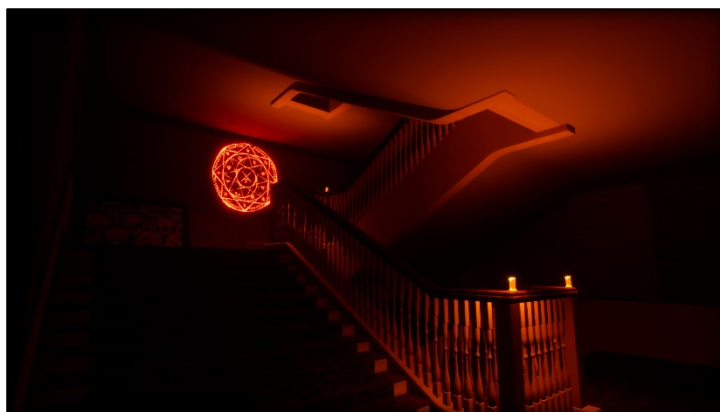
Figure X - In-game staircase

c)   The rooms

The room are also based on the Stanley Hotel, but on the actual build only the bed, the ceiling lamp and the closet are from the references, we focused on other parts of the building to have the minimum of asset everywhere to understand the role of each space.

Figure XII - Stanley Hotel bedroom

Figure XII - In-game bedroom

d)   The monster: the dark cultist monk

For this one we've been looking for a monster from the style of the one in *The Nun* movie, I was one of our first idea of monster (because it could travel through shadows), but we gave up the idea to have a monster that would fit our first level.

When we switched for the Hotel level, we went on a **dark monk** that match with our idea of a **demon cult** inside the hotel.

Figure XV - The Nun, 2018 C. Hardy

Figure XV - Main outfit reference for our monster

Figure XV - Monster final result (With weight paint issues)

III.   GAMEPLAY

A.   Player Mechanics

1.   Moving

The player can move in four space directions using 4 keys (Z, Q, S & D) and look around while moving the mouse. He can also move just by pressing one direction key while moving the camera to change the direction: movements are ties up to the camera.

Figure XVI - In-game First Person View

2.   Sprinting

The player can sprint holding shift key, a **mix of sounds** are played during the sprint that are the voice of the character, the cloth friction, a heartbeat acceleration, and the acceleration of the squeaky footstep sounds.

On top of the emitted sound range is increased to raise the detection range of the player by the monster.

During the sprint a soft camera shake is added to the screen and once the sprint is unavailable, a cooldown with an exhausted breathing and a faster heartbeat sound can be heard.

This isn't accessible *(No sprint/stamina bar),* but we wanted something immersive for the player.

### 3.	Interaction

By pressing E, the player will be able to interact with various gameplay elements such as keys, doors, collecting item.
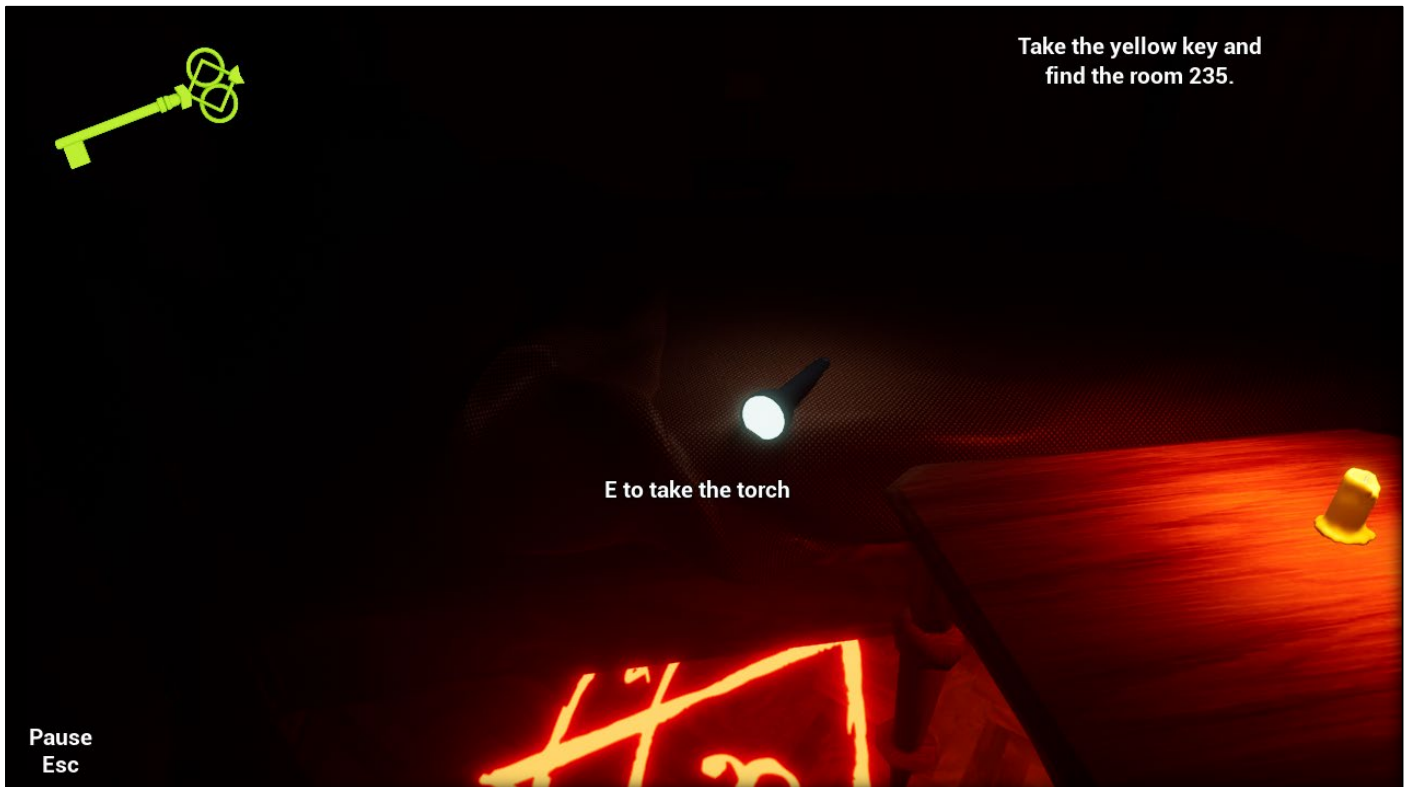
Figure XVII - Interaction to get a torch

### 4.	Torch

Once the player gets the requirement to use a torch, by pressing F he will be able to have a spotlight at the middle of its screen to light his path.

Figure XVIII - Torch used to enlight the dark hallways

B.   World Mechanics

1.   Doors

There are two types of doors: normal and "coloured" ones.

For the first type they are usually closed but if they can be opened by the player they will be **half-open** to invite the player to get closed to it. About the closed ones, if the player tries to open them, it will shake them and emit a sound that will get the attention of the monster.

About the **coloured ones**, they need a **key** of the same colour to be opened. And once they are open it will emit a sound that will get the attention of the monster. When it's closed it's the same behaviour as the normal door if the player doesn't use the right key.

Figure XIX - Closed staircase (green) door

2.   Keys

Keys are only used to open the door they're associated with. And for now, it's the only way to open doors.

Figure XX - Yellow key (Metalness & warm light make it hard to distinguish colour)

3.   Hiding Spot

Player can hide inside those "closet" to escape the monster. Once inside the player can hear its own heartbeats.
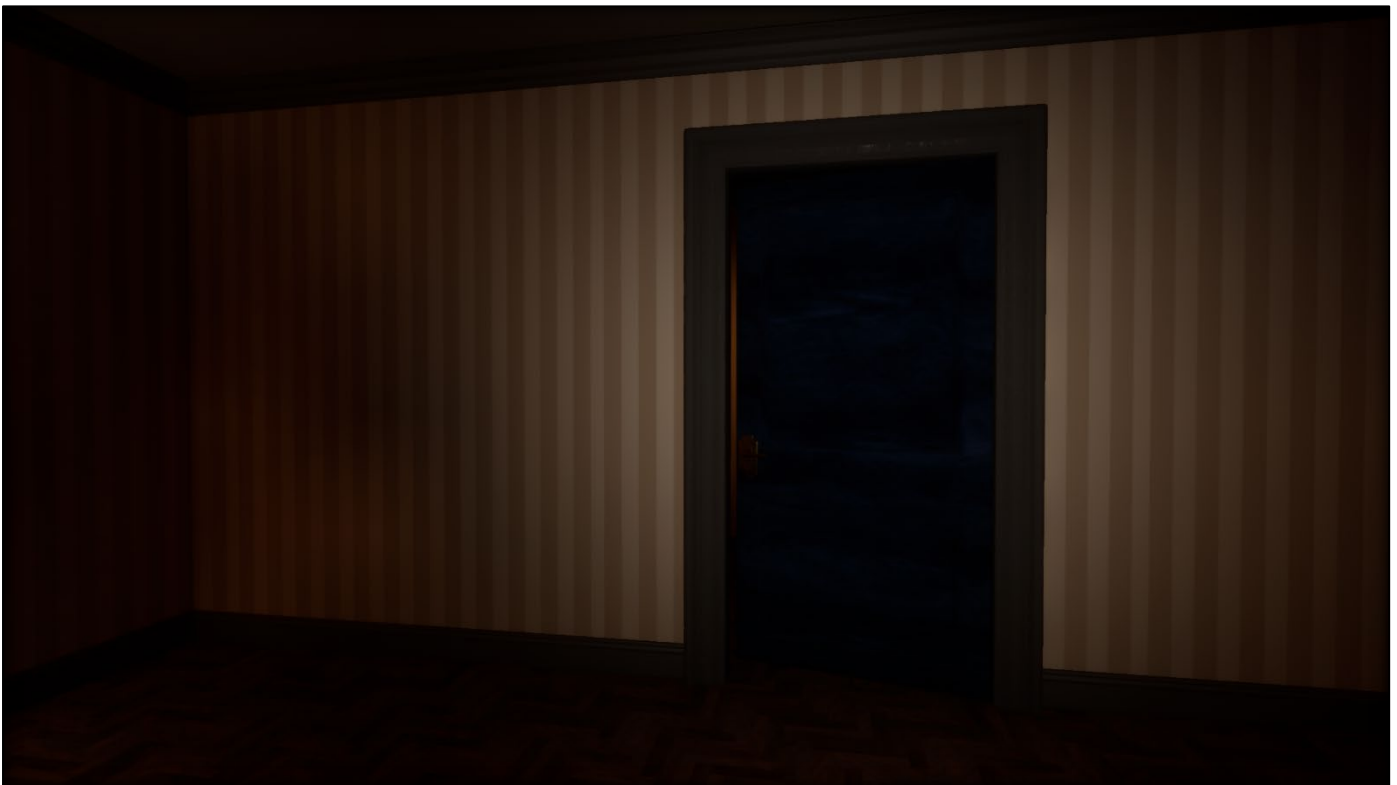
Figure XXI - Closet (blue) door

Once hidden inside the closet, the light inside is shutdown, and the player can see a little part of the outside from the space between the door and the door frame. A little camera shake has been added to add the silent breathing effect. The opening is at the right spot to see the monster face if it gets close to the door, to **tense up** the player.
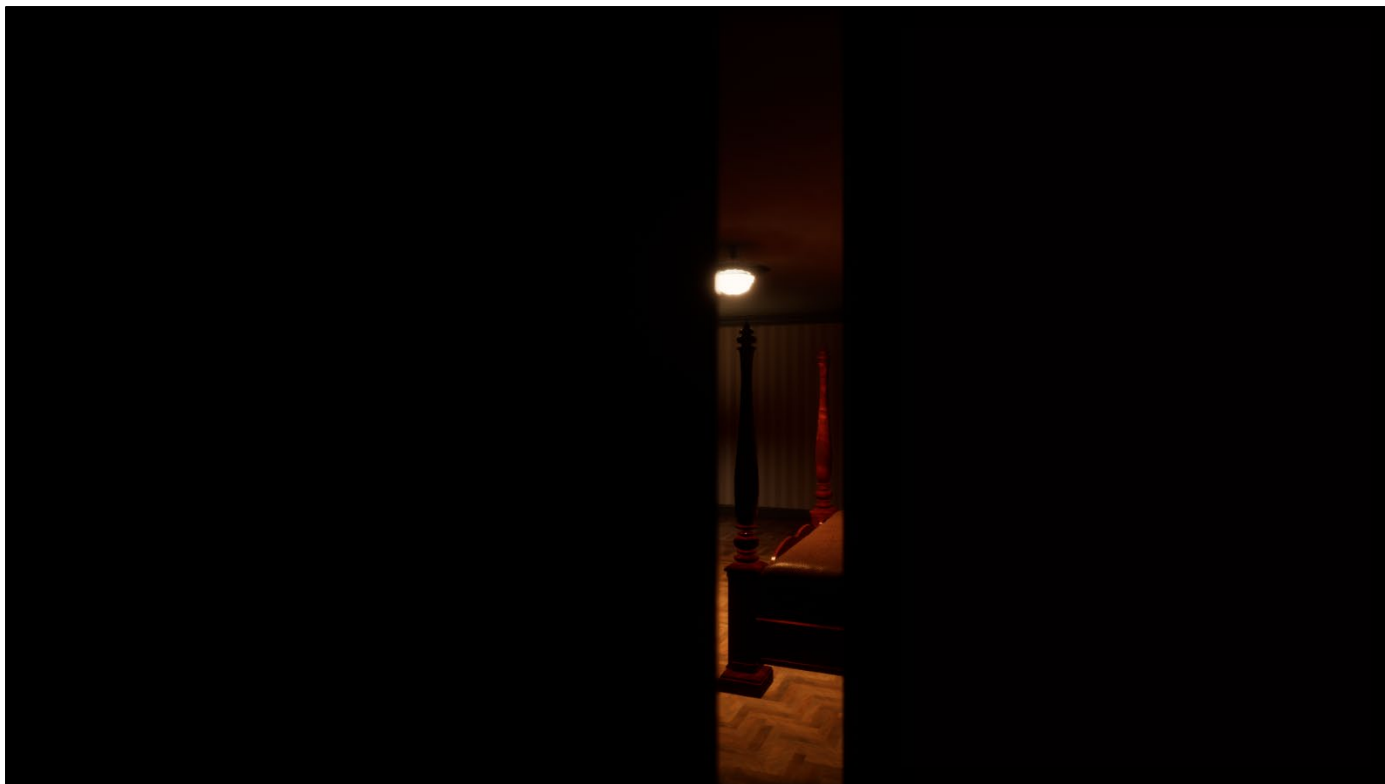
Figure XXII - Inside the closet view

4.   Random Sound Events

In various point in the hallways are behind doors, there is random sounds event that can happen when the player goes through a threshold, that are here to **raise the tension** with **eerie** and **creepy sounds**.

These sounds are **spatialized** to enhance the perception of them so the player can understand where they come from: from behind a door, on the floor above him (with rumble noises), behind him, …
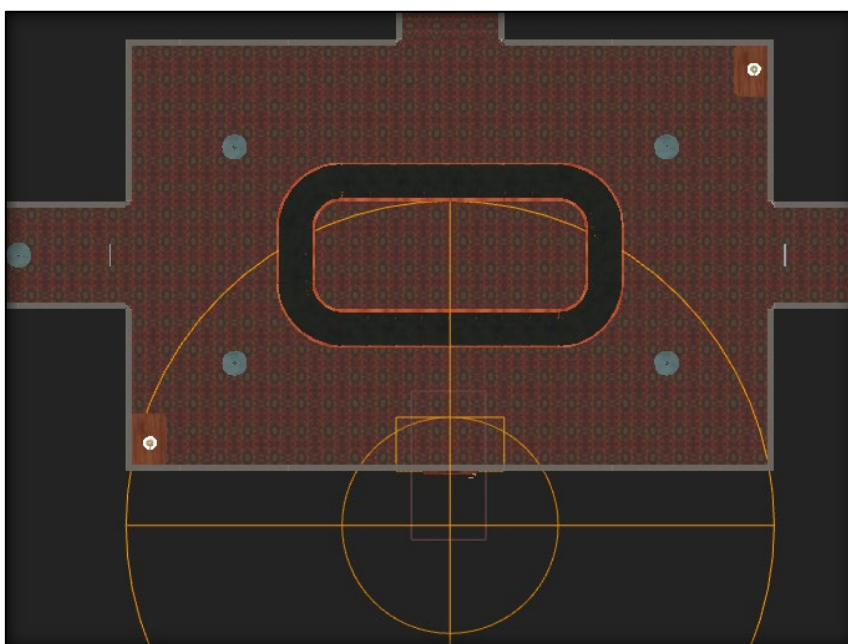
Figure XXIII - Random Sound Event on a door (Sound Range & Interaction Trigger Box)

5. AI Monster

The monster will **chase the player** once it **sees** or **heard** him, and if he loses the sight of the player, he will check around the last position he sees or heard a sound.

The monster also **emits sounds** to be noticeable by the player, to make it more realist we added loud and deep squeaky footstep sounds and we made an evolutive ambient sound around the monster when the player gets closer to the monster, in order to raise the tension & the stress the closer they are.

His eyes also **emit a light** around him to be easier noticeable from long distances.

This choice of sound design range and light is to make the game easier, because the monster will always **walk faster than the player** to force him to use his sprint ability or hide to lose the monster attention.

6. AI Director & Monster spawn points

To make the **position** of the monster more **uncertain** for the player and raise its **paranoia feeling**, we added an AI Director to control the monster spawns and despawns:

- When the monster isn't in the line of sight of the player it will disappear after a certain time and reappear on a "human circle" on the ground, randomly around the level.
- When the monster spawns, a special sound is emitted in the level.
- The Director will be deactivated on the second floor because it's a scenarized hunt floor.

Figure XXIV - Monster spawn circle

7. Moving Objects

On the second floor we introduce moving objects: in this case it's a squeaky door that close once the player reaches a corner and gets enough time to see its closing animation.

Moving object are here to make the player **doubt** on a potential incoming danger or scare him.
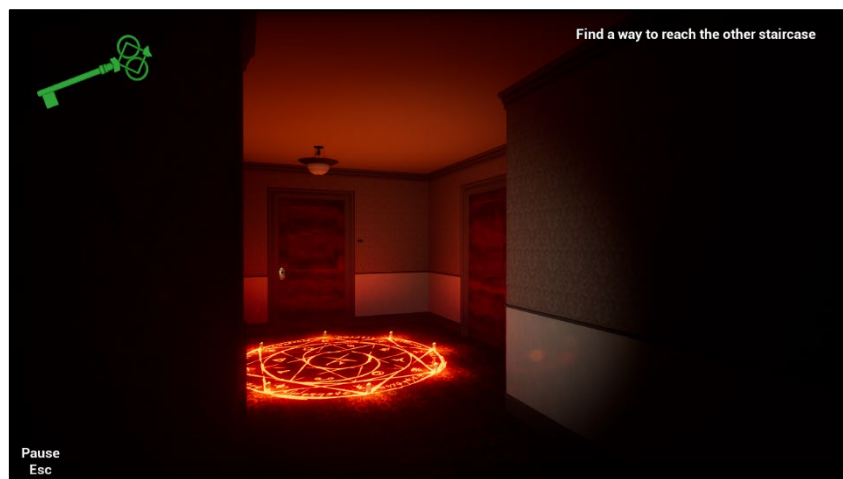
Figure XXV - Closing door location

8. Wall Hole

On the second floor is introduced the wall holes, they are used to allow the player to slowly change spaces while being hunter by the monster, since the monster is "too big" he is unable to take this path and will try to find another one if it's possible.

While inside the hole the player's speed is divided per two and he cannot sprint, which make this passage a **high tension** one if the monster is right behind the player, because he can still catch the player during his space change.

Figure XXVI - Hole in the wall between two chambers

9. Wall Runes

These runes are made to **raise the tension** while the player reach their space, they aren't visible from far and slowly appear once the player reach them, with an **overwhelming whisper** sound around them.

Figure XXVII - Wall runes in a hallway

C.   Metrics

As said earlier in the document, the metrics have been "doubled" during the blockout phase to find proper and coherent perception of the space for the player point of view.

We cannot change them now as it would require remaking the whole level and assets.

1.   Character

a)   Size
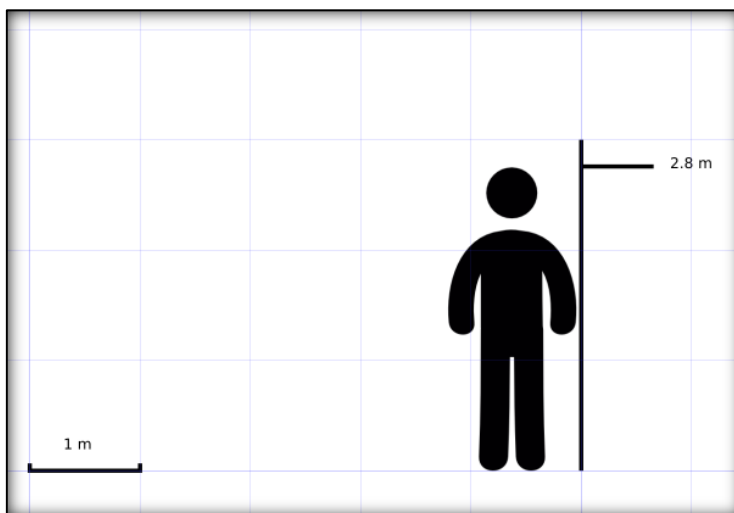
Figure XXVIII - Player Character Size

b)   Interaction Range

The player can interact with elements that are from 0 to 0.8 meter from the player.
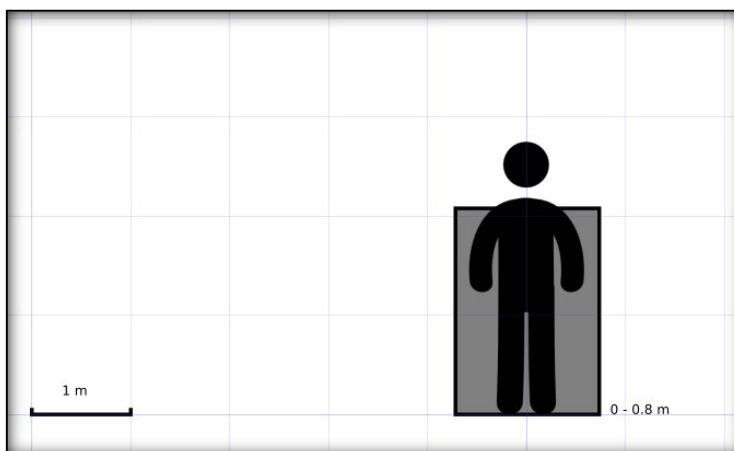
Figure XXIX - Player Character Interaction Range

c)   Sounds Range & Speed

(1)   Walking
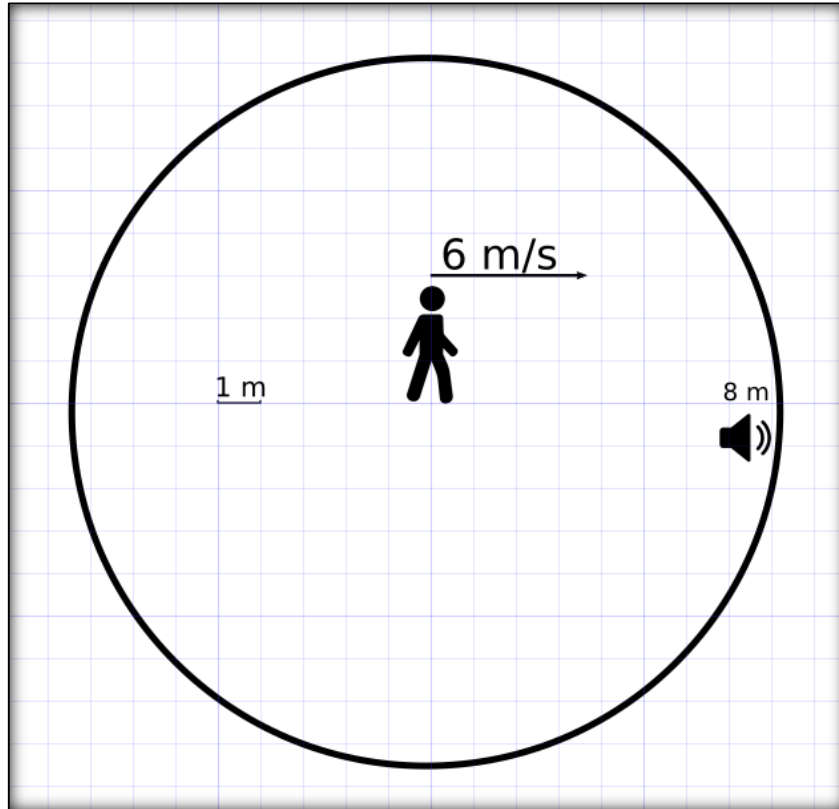
Figure XXX - The player walks at a 6m/s speed and emit footstep sound 8 meter around him

(2)   Sprinting
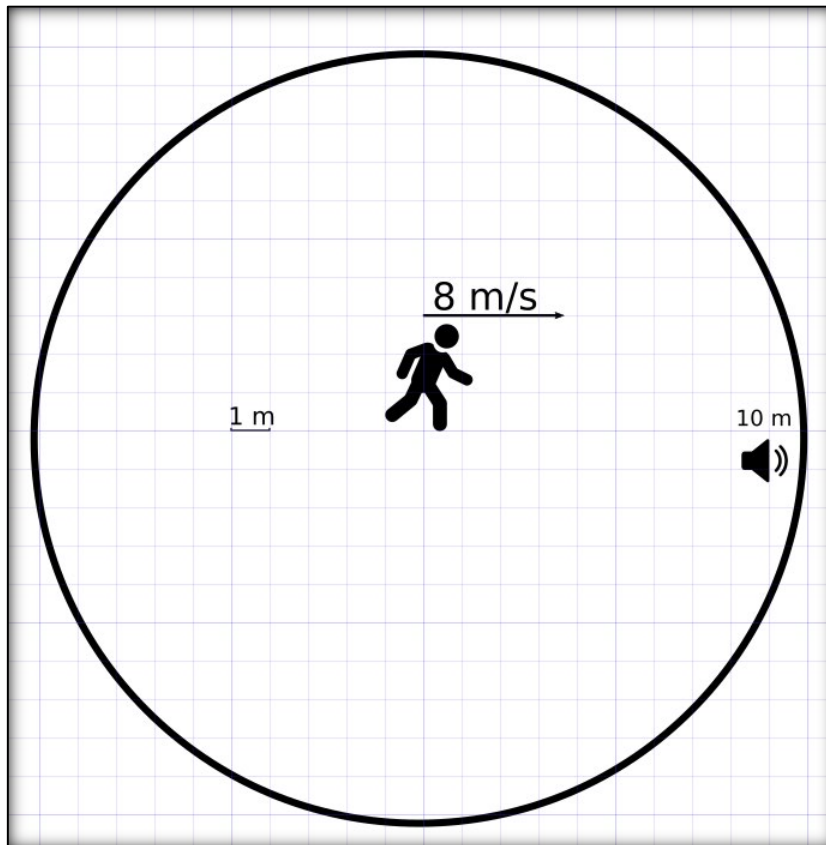
Figure XXXI - The player walks at 8m/s speed and emit footstep sound 10 meter around him

2.   Monster

a)   Size

3.8 m

1 m
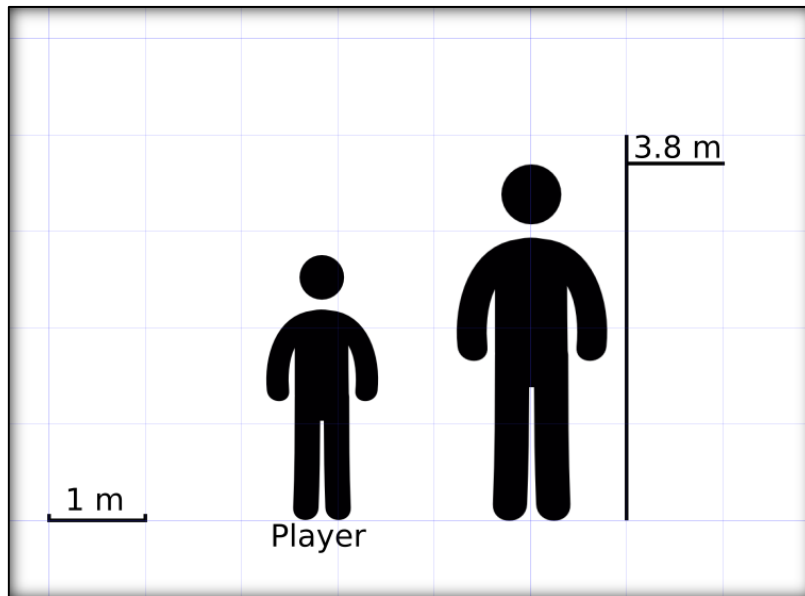
Player

Figure XXXII - Monster size compared to player size

b)   Interaction Range

1 m

0.5 - 1.5 m
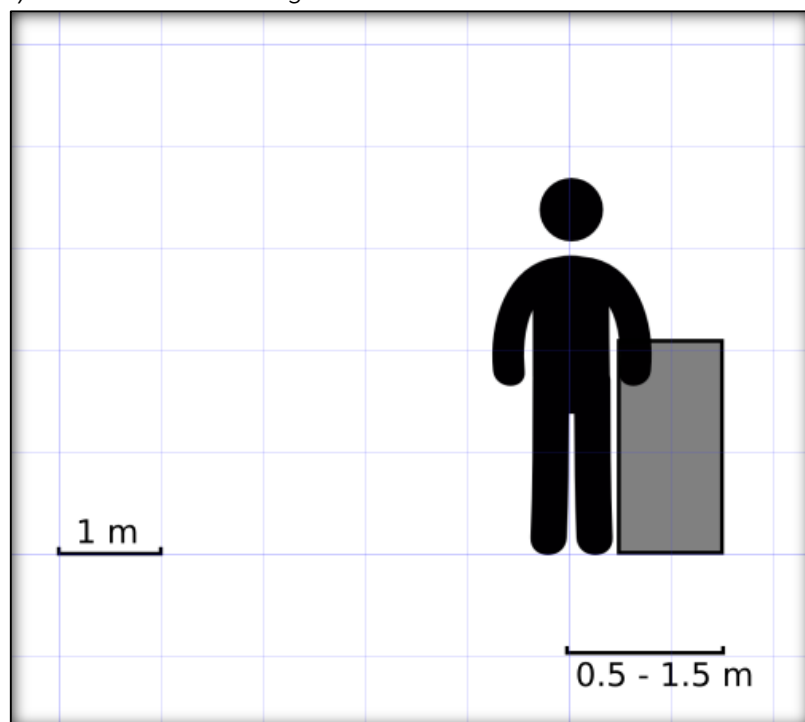
Figure XXXIII - Interaction range from 0.5 to 1.5 meters in front the monster, to be able to grab the player

c)   Walk Speed
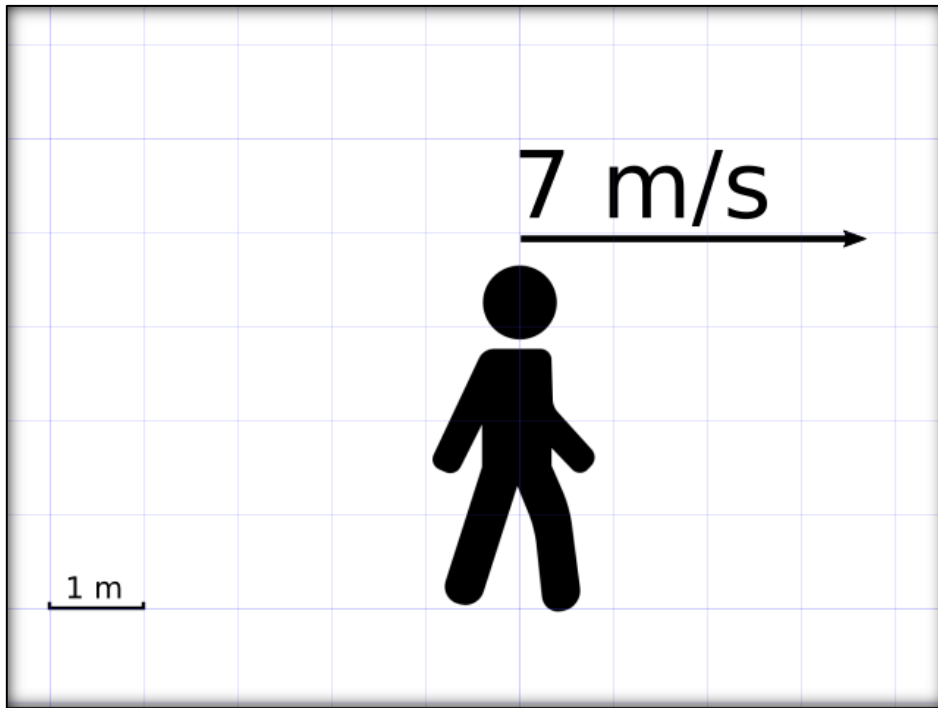
Figure XXXIV - Monster walk speed

d)   Perception Range
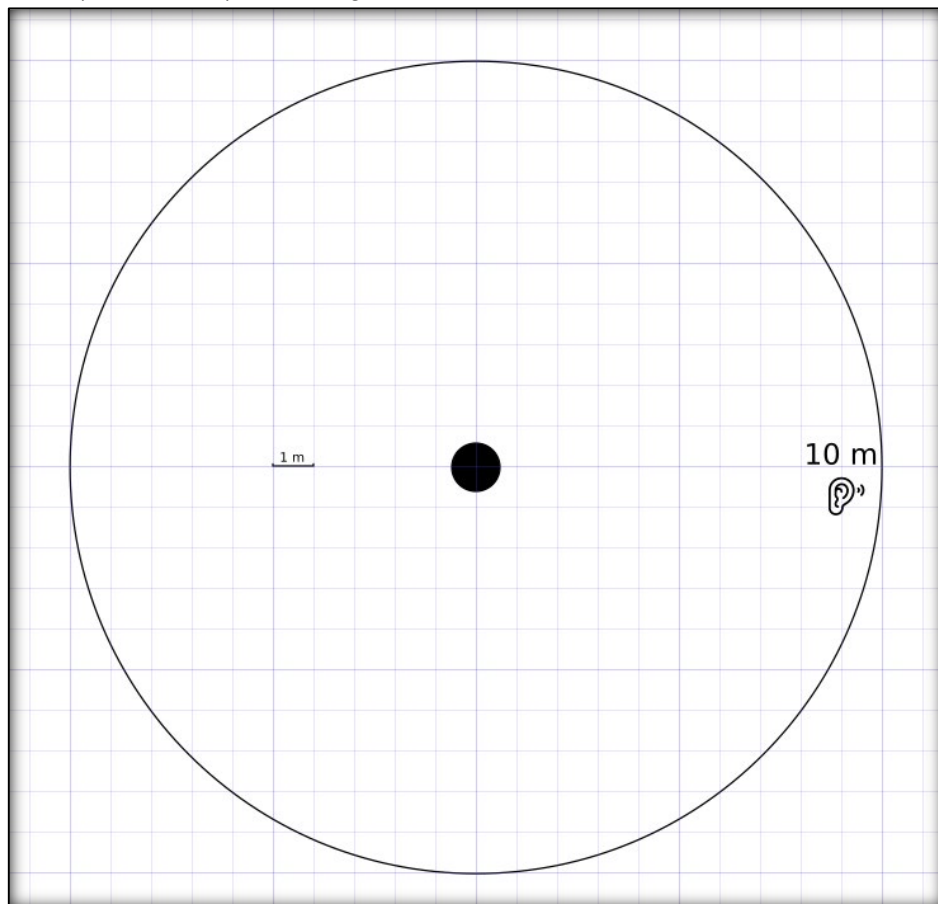
Figure XXXV - The monster can hear the player up to 10 meters from its position and have almost an infinite line of sight (it cover the playable level)

IV.   GAME SPACE

A.   Molecular Diagram

1.   Concept

The level consists of being the inside of an hotel, so all the space will be **indoor** and **closed**: There is not windows yet in the level and it wasn't intended for the player of being able to see through them.

The spaces are all tied together by narrow hallways that are meant to give tension to the player while moving through them.

About the different spaces, we have to take in consideration that they can all turn into **contested space** because of the presence of the monster:

- Chambers, that are **nodal space** where the player gets the key in the actual build but may change into **challenge space** to give more tension and relevance.
- Mini Hall are space that are meant to connect chambers and hallways together, like "sub-hub" spaces with no purpose other than connect spaces.
- Medium Hall are larger space meant to connect hallways, chambers, and bigger spaces like the Elevator Hall, and can be relevant once turned into a **contested space** by the monster.
- Elevator Hall is the same as the Medium Hall, unless we decide in later version of the build to make the elevator being usable by the player, so it could become a "Floor Hub" space.
- Staircase are spaces used to connect the different floor, where the player will have a short break and the game run function to setup the next level.
- Finally, the Corridor, they are backdrop space that the player cannot access, that are made to create the continuity of the hallways.

Due to the actual simple game concept, the spaces are also simple.

The shapes pf the molecular diagram has been made from the overall maps to make them easier to read, because of the multiple space with the same name *(behaviour)*.

2.   Floor 1

FLOOR 1
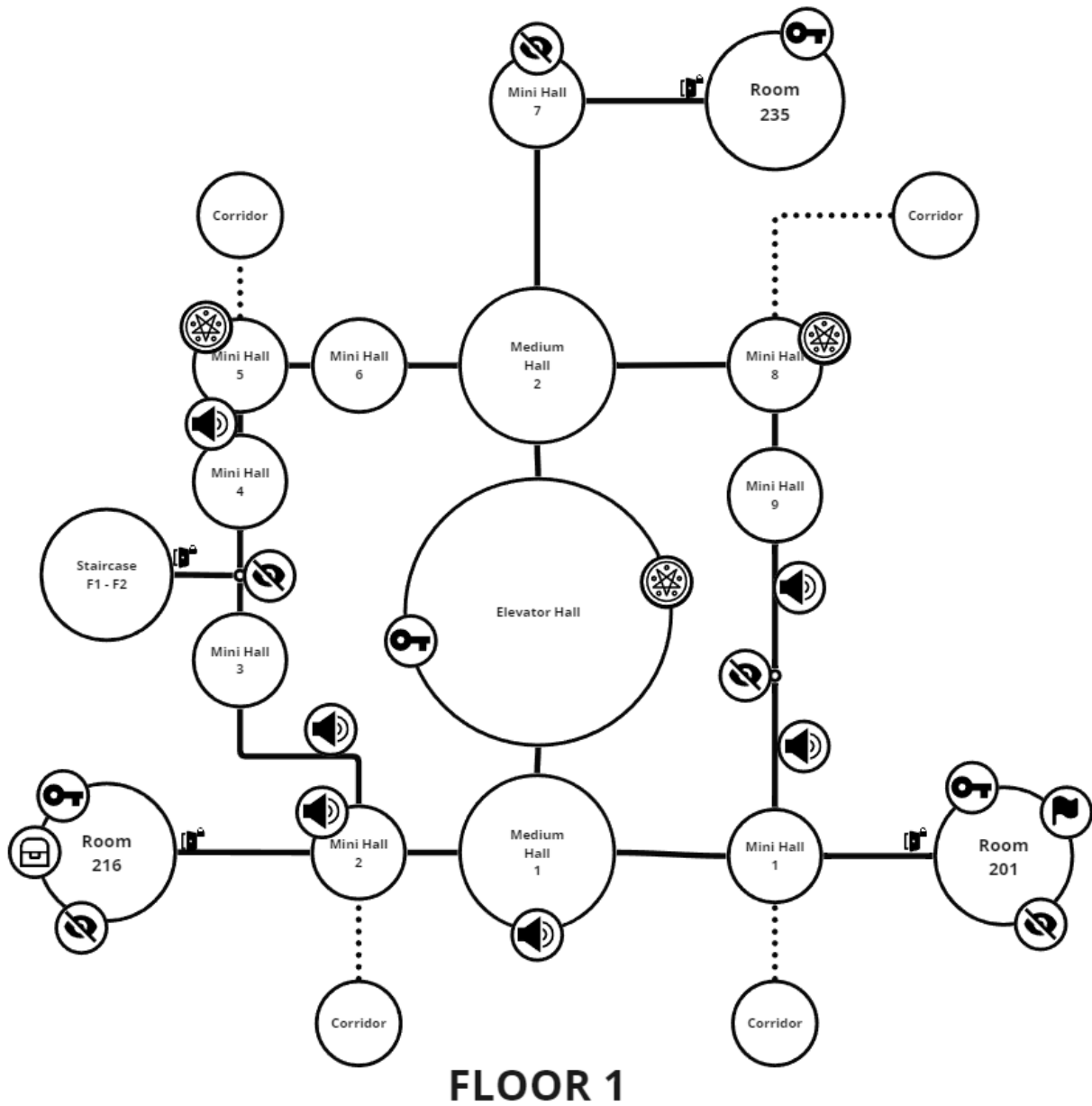
KEY POINTS:

🚩 **Player Spawn / Continue Point**

[🔒 **Locked Door (need a key)**

🚫 **Hiding Spot**

🔑 **Key**

⛤ **Monster Spawn Point**

🧳 **Item**

🔊 **Sound Event**
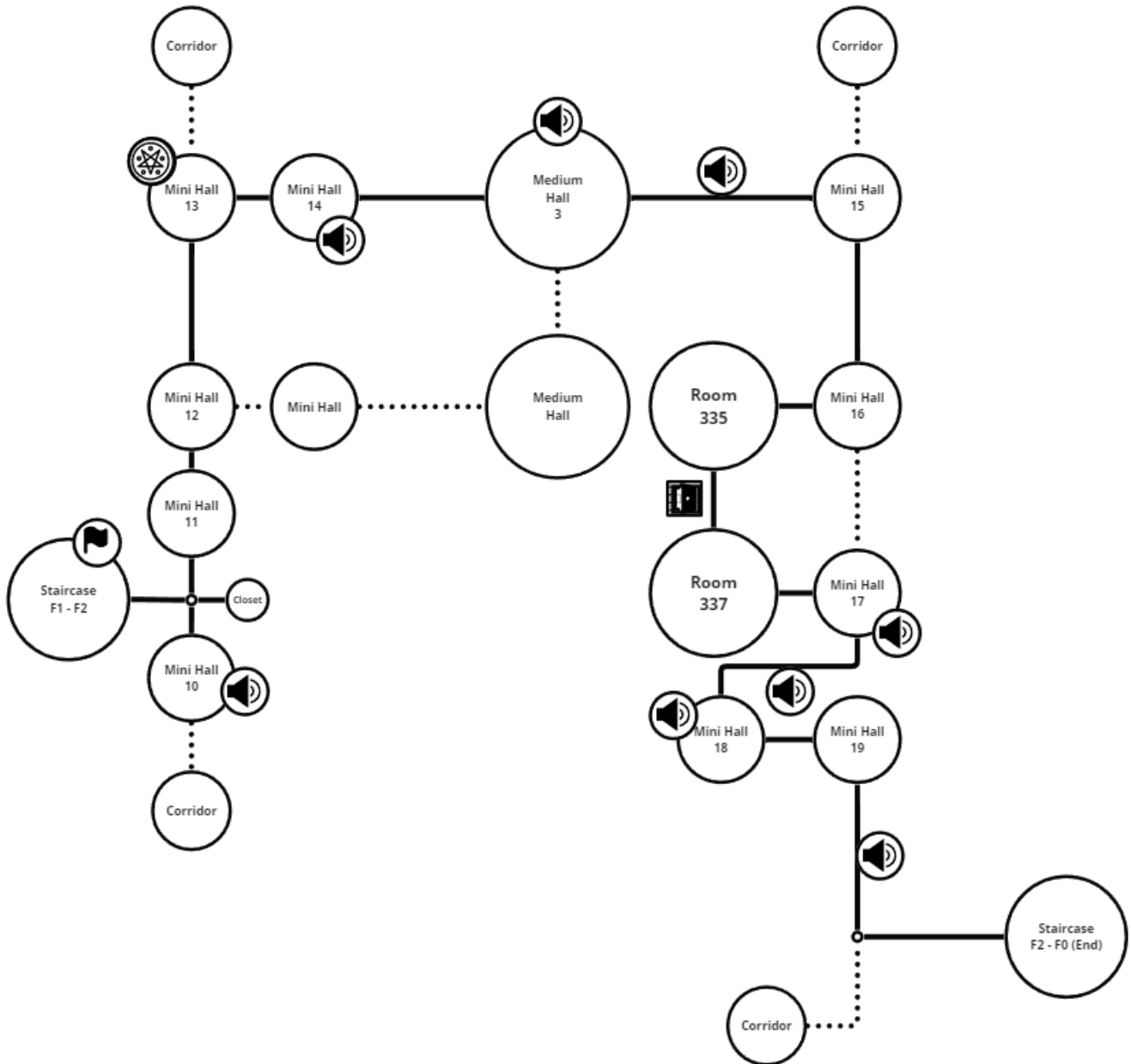
3.   Floor 2

FLOOR 2

KEY POINTS:

🚩 **Continue Point**

☉ **Monster Spawn Point**

🔊 **Sound Event**

[:] **Wall Hole**

B.   Overall Maps

1.   Concept

a)   Global overview

For the level design we made the two floors **asymmetric** so the player can know where he is, even if the spaces almost all look like the same, they all have a unique stagging that make them different from the others, but that's little detail, not really visible for the first build because of the lack of asset in the stagging.

In the big spaces, big sofa at the middle have been added to create "islands" to **break the flow** of the player and give him the opportunity to escape the monster if he encounters it in one of these spaces.

Even if they are not visible, there are **static spaces** in all the floor: the elevator hall and the two staircases, by this we mean that regardless the floor the player is, the **location** of these space will **remain the same**.

What we call **Level Function** in the key points are function that affect all the level to activate the next state, for example in the floor 1, it will start an event that will activate the monster AI and shutdown all the light of the floor.

On the second floor, the functions are here to remove the AI Director, spawn the hunting monster and trigger the moving door animation.

b)   Player guide

In the level various guide have been placed in the scene to indirectly help the player finding its way:

- The **Exit Signs** are placed with UK standards by placing them on each path changes to avoid confusion while looking for exit. They are also glowing to make them catchier.
- The **Magic runes**, the one with an eye is always set near points of interest for the player.
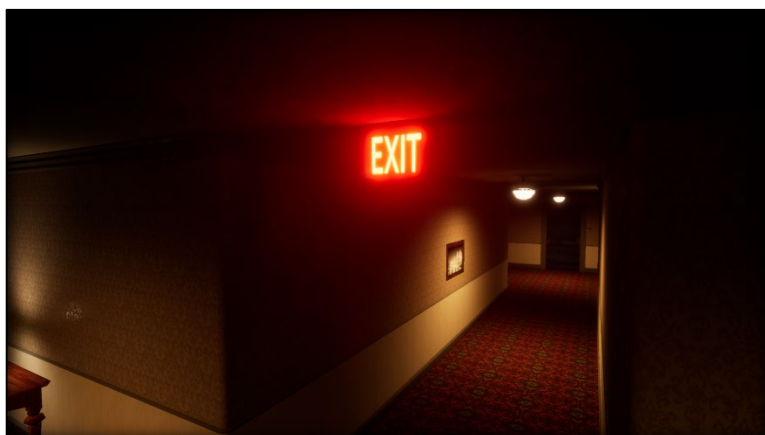
Figure XXXVII - Exit Sign
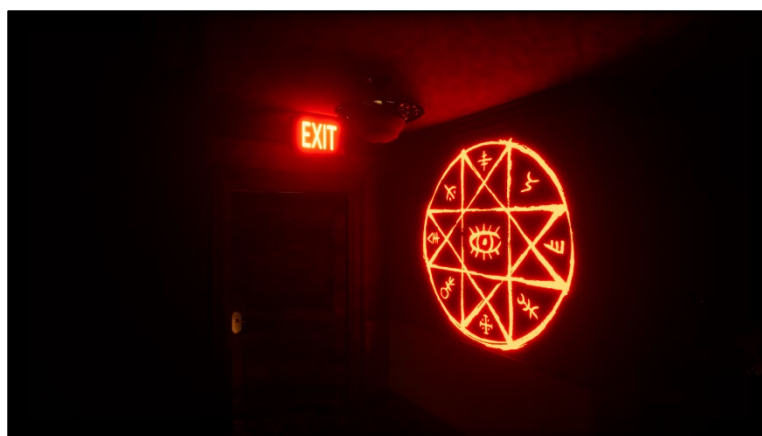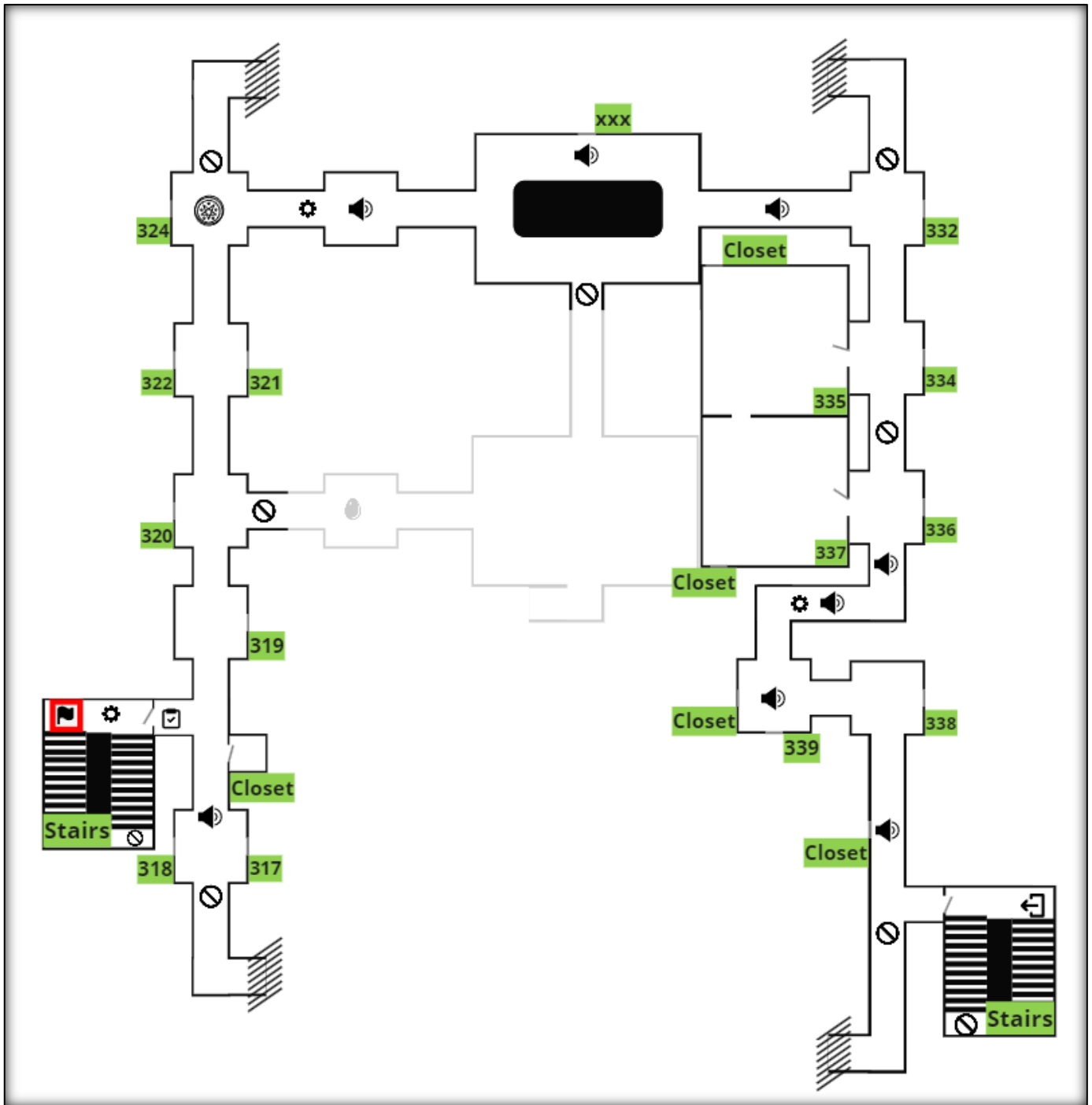

Figure XXXVI - Magic rune : Eye, near the final staircase

2.   Floor 1

KEY POINTS:

⬤	Easter Egg	🚫	Invisible Wall	🚫👁	Hiding Spot
☑	Helper Text Update	🟦	Coloured Door *(here blue)*	⚙	Monster Spawn
⚙	Level Function	⚊🔑	Coloured Key *(here blue)*	📷	Item (Torch)
▨	Level Bound End	🔊	Random Sound Event	🏴	Player Spawn

3. Floor 2

KEY POINTS:

|			
🥚	Easter Egg	🚫	Invisible Wall
☑	Helper Text Update	🔊	Random Sound Event
⚙	Level Function	⚛	Monster Spawn
▨	Level Bound End	🏴	Player Access

C.   Mission walkthrough

1.   First Floor
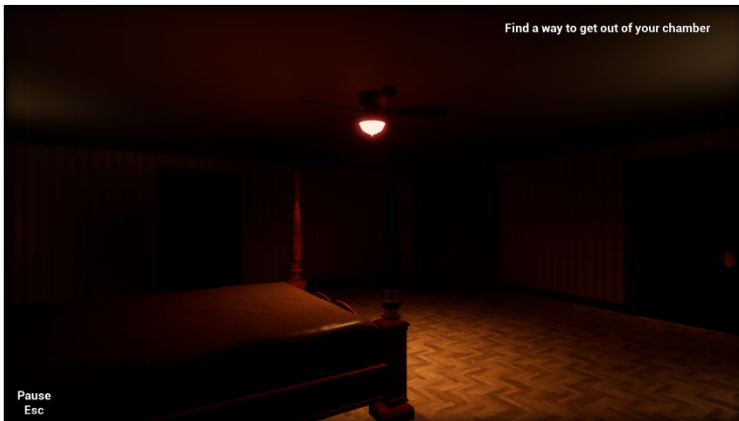
The player star in the chamber, in a calm and eerie ambiance.

An open closet is here to show him how they work.

He must take the blue key to be able to leave the room.

Once taken he can open the blue door to leave the chamber.
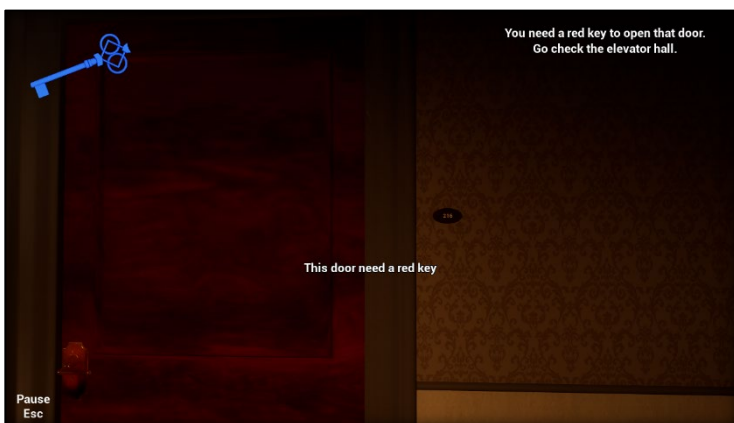
Outside the chamber he must find and check the chamber 217.

Infront this chamber a message to find the red key to open this door is displayed.

A clue is given to tell him to check the Elevator Hall.

In the Elevator Hall, the key (red) is on one of the tables, he must take it.
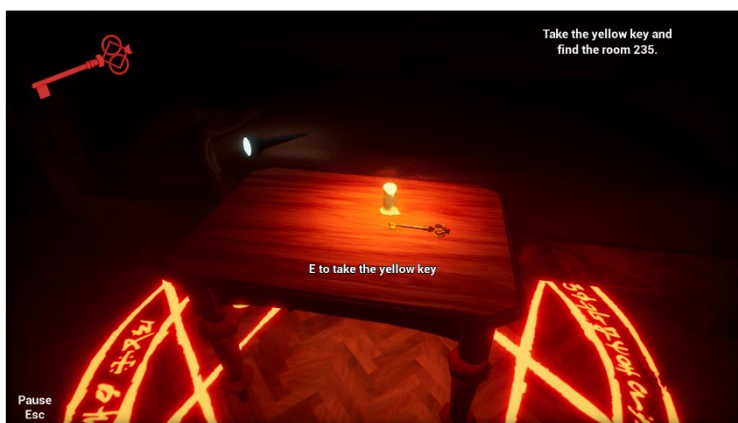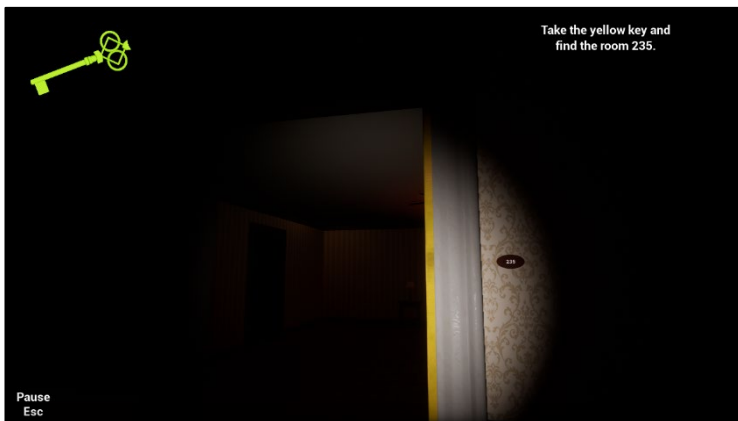

Once the door of the chamber 217 open, he must enter and check the table with the new key (yellow).

When the player approaches the table, the light shutdown and weird sounds are starting to appear.

The player must take the yellow key and a clue about the next room (235) is displayed.

He can take the torch or leave it, but he needs it to be able to see the room numbers.

Once arrived in the chamber 235 he must open the door and enter in the new room.
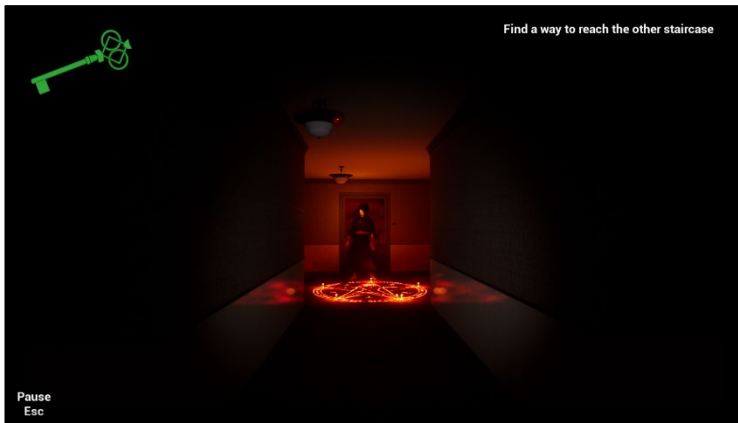
In the chamber a new key (green) is on the table, he must take it to be able to open the green door, which was the staircase door he might have encountered during his path to this room.
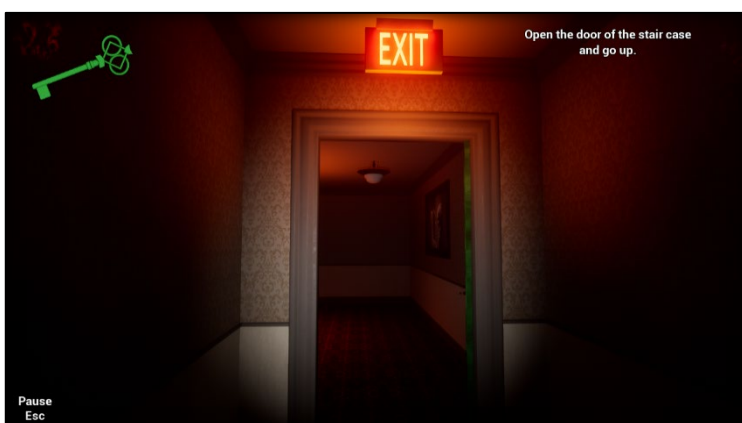
The player can now open the staircase door and reach the new floor.
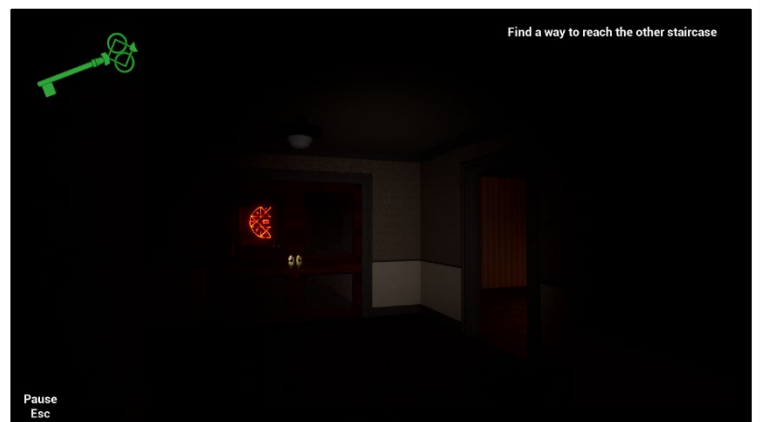
2.   Second Floor

At the second floor the player needs to find a way to reach the other staircase because these ones are blocked.

During his move inside the hallways a "crack" sound will appear and the monster spawn behind him ready to hunt him.

The player must now run to evade it.

During its run, the player will face a dead end in the hallway but a room with light on is open.
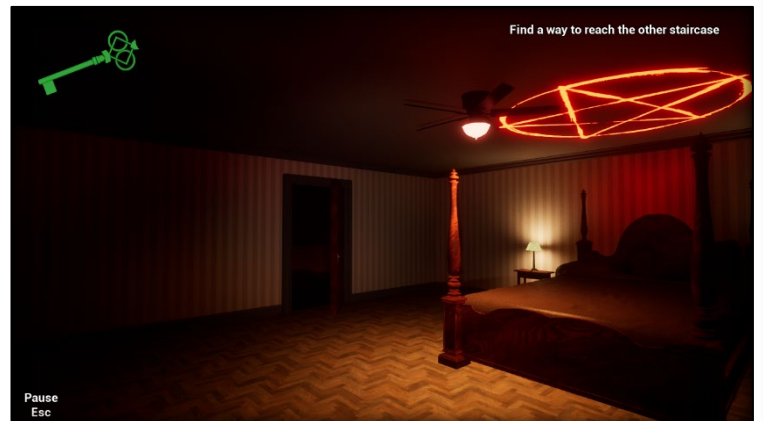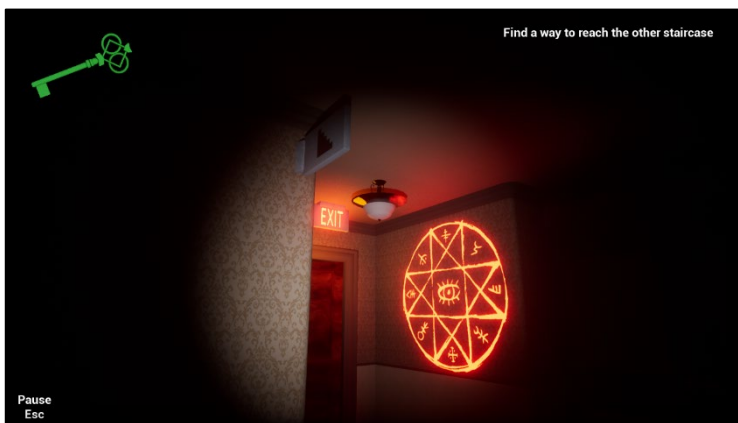
When the player enters this room, the wall on its left is destroyed with a big enough hole to go to the next room.

The monster cannot take the hole and the player is now safe.

The door of this room is half open, so the player can open it to reach the next hallway.

The next hallway after few seconds of walking, will lead him to the next staircase.

End of the level past these stairs.