



# NIGHTMARE

A 3D first-person horror experience.  
Developed by Shubham Aradhye | MAGI | S3929131

# OVERVIEW

Nightmare is a 3D first-person horror experience which explores the gameplay element revolving fear and anxiety. This is particularly around my inquiry that “how can fear and anxiety be expressed using 3D environments and sound effects?”

The theme of the experience explores dark and fearful environments to induce a horror experience. I used Unreal Engine for the design and development of this project.

Initially this project was supposed to go in a different direction but based on feedback, I thought to pivot to a different approach. The current approach is more suitable to a 3D exploratory game experience rather than a story-based character arc which was previously the plan,

# TREATMENT

**Game Engine used:** Unreal Engine 5

**Functionality Template:** Horror Engine is a playable demonstration of a horror game design tool available for free on the Unreal Engine Marketplace under the same name. It allows you to experience various mechanics included in the asset and explore the possibilities of game creation without requiring any coding knowledge.

Asset development: Photoshop and Blender for meshes and texture files.



**HORROR  
ENGINE**

# OBJECTIVE

The result of the production is a playable 3D first person horror experience. The target platform is PC, and no additional hardware is required.

The game will be further developed into a bigger scope and published on Steam Store next year.



Scan to access gameplay video

# MOOD BOARD

STORY → HAPPY  
↓  
HORROR      SUSPENSE

CHARACTER → MALE / FEMALE  
                  OLD / YOUNG  
                  ALONE / DVO / GROUP

LOCATION → CITY / VILLAGE / DISTANT

TYPE OF HOUSE → BARN  
↓  
VILLA      APARTMENT

PURPOSE → CONFRONTATION  
                  REDEMPTION

CHARACTER ROLE → EXPLORATION

INTERACTION → ARTEFACTS → VISIONS

ENDING → GOOD / BAD / SUSPENSE  
                  CLIFF HANGER??

CHARACTER

↓      ↓  
FEMALE      YOUNG

NAME - EMILY

References : ALICE from  
                  Resident Evil movie.

PROFESSION : JOURNALIST

OUTFIT : HOODIE & PANT

RED HAIR & SHORT LENGTH

DESIGN : LETS TRY  
                  METAHUMAN!!

Reasons : Natively supported by  
                  UES and works in VR.

## Version 1.0

This was the first version of the game. Initially, the game was targeted for VR platform and had a script written to progress the story in a specific way. Later the game plan changed to an open exploratory game.

# MOOD BOARD

PROJECT NIGHTMARE

V.2.0

PREVIOUS VERSION DID NOT  
SATISFY AND FELT BORING!!

TIME TO PIVOT !!

CHARACTER → NOT NEEDED!

STORY CHANGE !!

NO DEFINITE PURPOSE. CAN BE  
AS PER USER'S CHOICE.

THIS WOULD BE A VERY EARLY  
STAGE EXPERIENCE.

MAIN FOCUS: MUSIC, 3D ENVIRONMENT.

## INTERACTIONS

- 1.) FLASHLIGHT
- 2.) LIGHTER
- 3.) CANDLE
- 4.) DOORS
- 5.) LIGHT SWITCHES
- 6.) PHOTO FRAME SWITCH
- 7.) EVENT TRIGGERS.
- 8.) RADIO
- 9.) AMBIENT SOUNDS.
- 10.) FOOTSTEPS & BREATHING.

## Version 2.0

This version of the game was projected to be a lower scope open exploratory game pivoted because of some feedback on the Folio 1. The new version looks promising and has a better future scope for development.

# PROJECT PLAN

Weeks 1 & 2 – Story and Script Writing

Weeks 3 – Character Development & Color Palette

Week 4 – Sound Design

Weeks 5 & 6 – Level Design

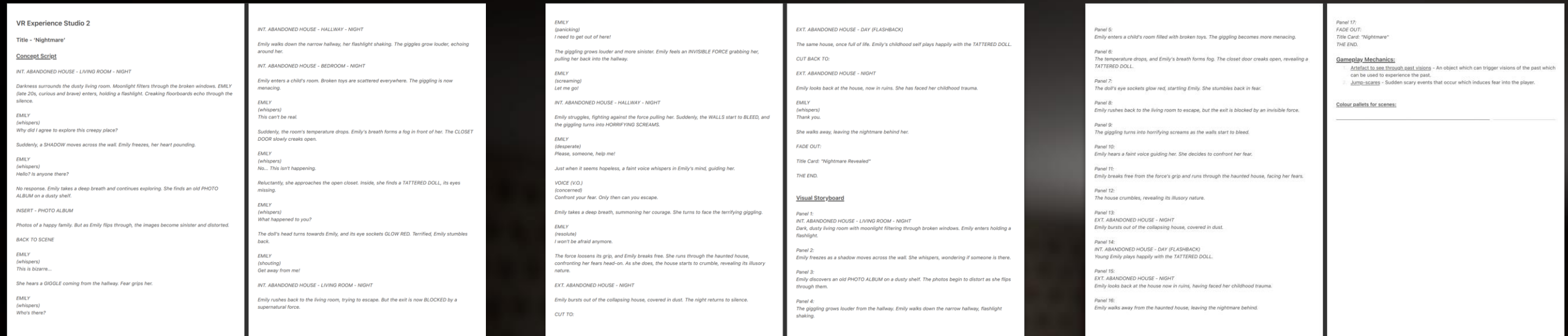
Weeks 7 & 8 – Character Animation

Weeks 9 & 10 – Level Interactions, VR Integration

Week 11 – Game Mechanics and Optimization

Week 12 – Testing and Final Improvements

# STORY SCRIPT



## V.1.0 PDF File – NIGHTMARE VR

### Changes to Script-

1. Story mode to exploratory mode.
2. Experience based more on sounds and 3d environment interactions.
3. Functionalities- flashlight, lighter, candle for light source; event triggers for sound and environment interactions.
4. Character removed; no character specifically needed. This is done to generalize the game for every player and characterize the game as an experience.
5. How to end the game is not defined, the game has a future development scope which will add more levels and interactions. As of now the player is trapped in a hall with 2 bodies of the previous players that attempted to escape. This creates a fear and anxiety situation which serves the main motive of the experience.

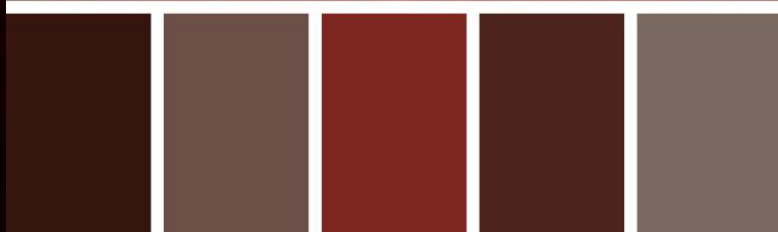
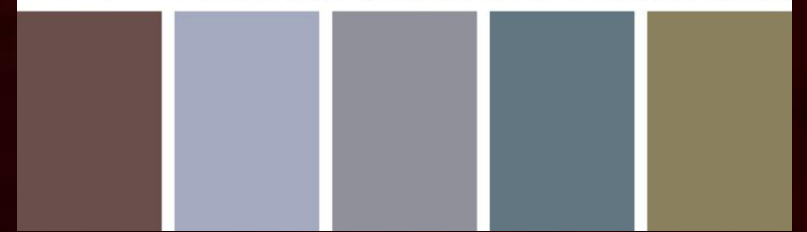
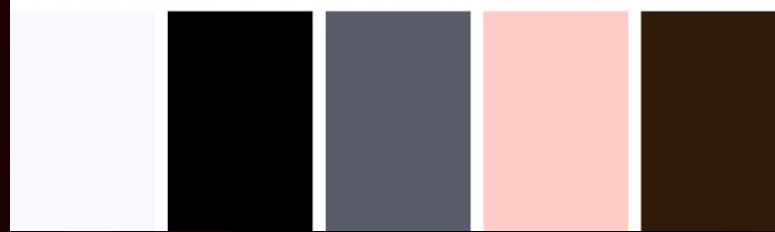
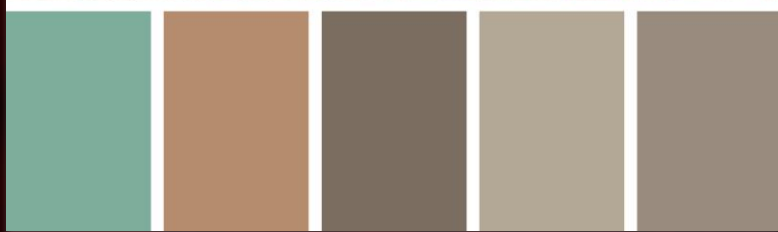
V.2.0

# WHY PIVOT???

The decision to pivot to a new approach was taken because of the feedback received on Folio 1.

The feedback stated that I wasn't making anything new rather using pre-made asset packs and just drag-drop into Unreal Engine. Another factor was that the inclusion of a game character was no longer making sense as it was supposed to be a first-person game. For example, we don't see the main character in the games like Outlast, Half Life, etc. and we just keep playing as ourself.

# COLOR PALETTE



The combination of colors is a dark and horror theme to match the game aesthetics. I used vibrant color lights as a frightening effect.

# LEVEL DESIGN

## Version 1.0

The first version of the game was built using assets from an asset pack on Unreal Engine. The whole level was a product of ready placeable assets which required no work. This did not quite fit in the production outcome which I expected. Therefore, I decided to make a completely new level from scratch.

# LEVEL DESIGN

## Version 2.0 STAGE 1

This version of the level used assets developed from scratch and placed into a well-designed building layout. This provided a sense of development by a huge margin compared to what was done in Folio 1. The assets used in this stage of development were from Quixel Megascan and all of them were placed into the level individually.

# LEVEL DESIGN

## Version 2.0 STAGE 2

The main objective of level design was to create a mansion level with 2 floors.

1. Ground floor- Serving the entry point and base for event triggers leading into the next stage of the game.
2. 1<sup>st</sup> Floor- This floor served the fear stage of the game and this is where all the fear events are triggered. The main objective of the game is accomplished in this level.

# LEVEL DESIGN

Version 2.0

STAGE 3

At this stage of level design, I used detailing techniques like decals and mesh optimization using material mapping in UE5. Decal collections on Megascan provides a better detail on top of existing meshes and adds a level of extra elements which further enhance the look and feel of the scene.

# WHY USE HORROR ENGINE???

Initially, I tried developing my own set of functions in Unreal Engine. Having no prior experience with game development and lack of time, I decided to use Horror Engine as a template for integrating functions which were essential for the game to work. These functions include-

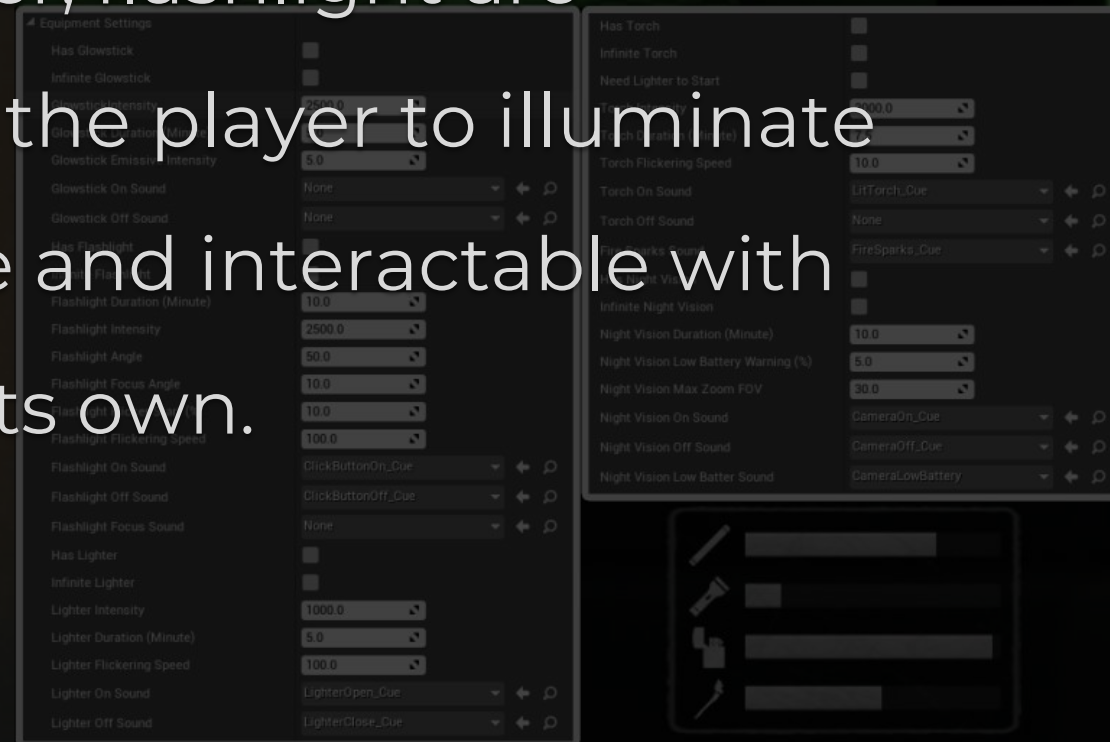
1. Usable assets- lights, buttons, doors and electronics.
2. Triggers- Overlap trigger, Look Trigger, Sound Trigger.
3. Footsteps sound.
4. Particle effects for explosions.

I realized that using pre-built templates for game functions require a lot of basic understanding of the game engine. And knowing how to implement these functions to properly work in my game was the main challenging phase of my project.

# GAME MECHANICS

**HORROR ENGINE**  
Light Equipments  
(Glowstick, Flashlight, Lighter, Torch and Nightvision Goggles)

The way these functionalities were implemented in the game was using blueprints. The template has a collection of usable assets and blueprints that control the working of certain functions. For example- lighter, flashlight are pickable objects and can be used by the player to illuminate the scene. These objects are pickable and interactable with the game and provide a function of its own.



# GAME MECHANICS

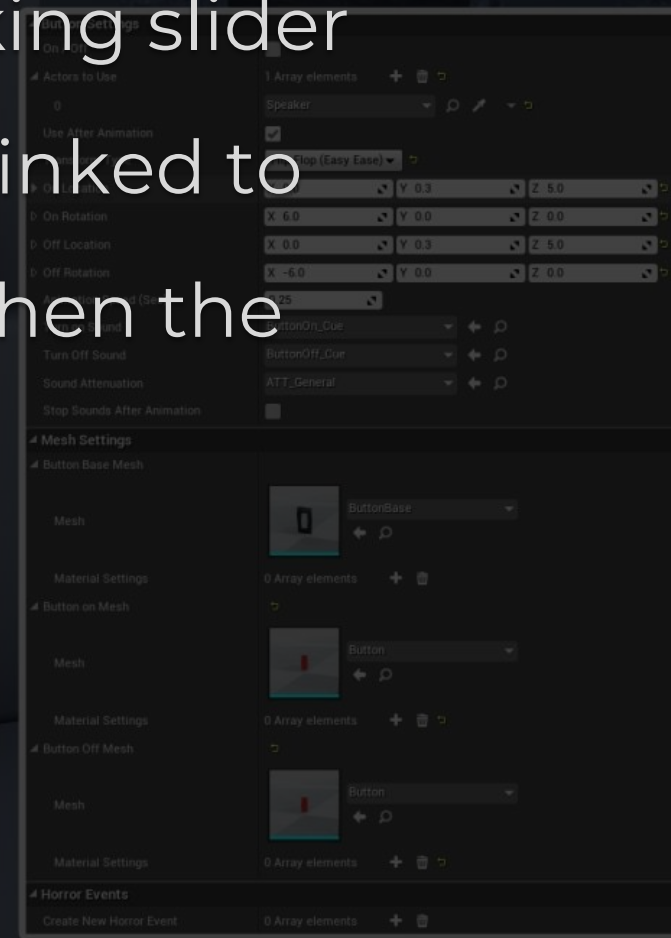
HORROR  
ENGINE

Modular Buttons

(including Secret Book, Torch and Pistol)

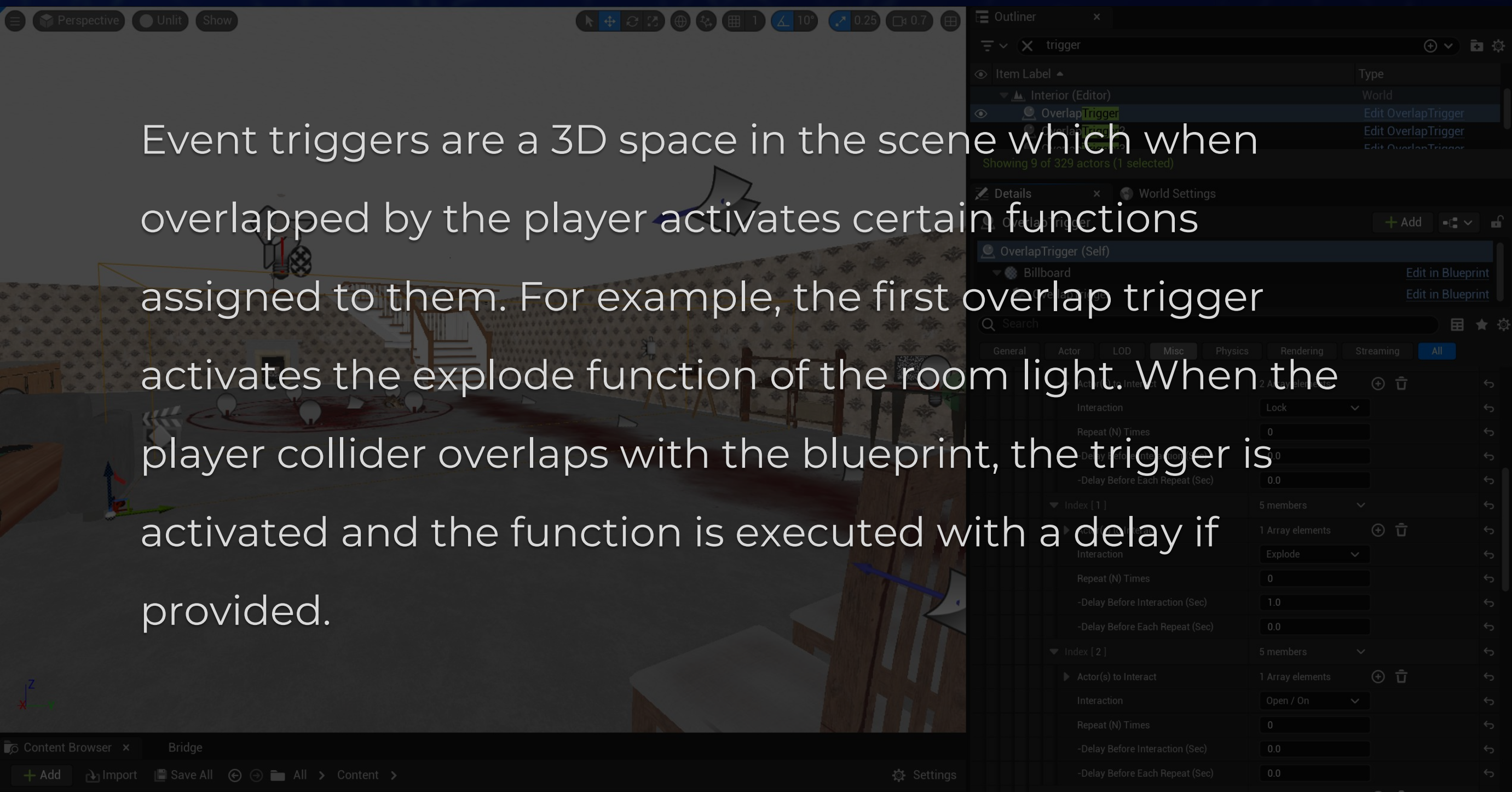
## Buttons

The buttons in the game trigger certain actions of the scene. These actions include turning on/off lights, opening/closing doors and entry points and locking slider and pivot opening doors. These buttons can be linked to horror events with overlap triggers to activate when the player overlaps with the trigger blueprint.



# EVENT TRIGGERS

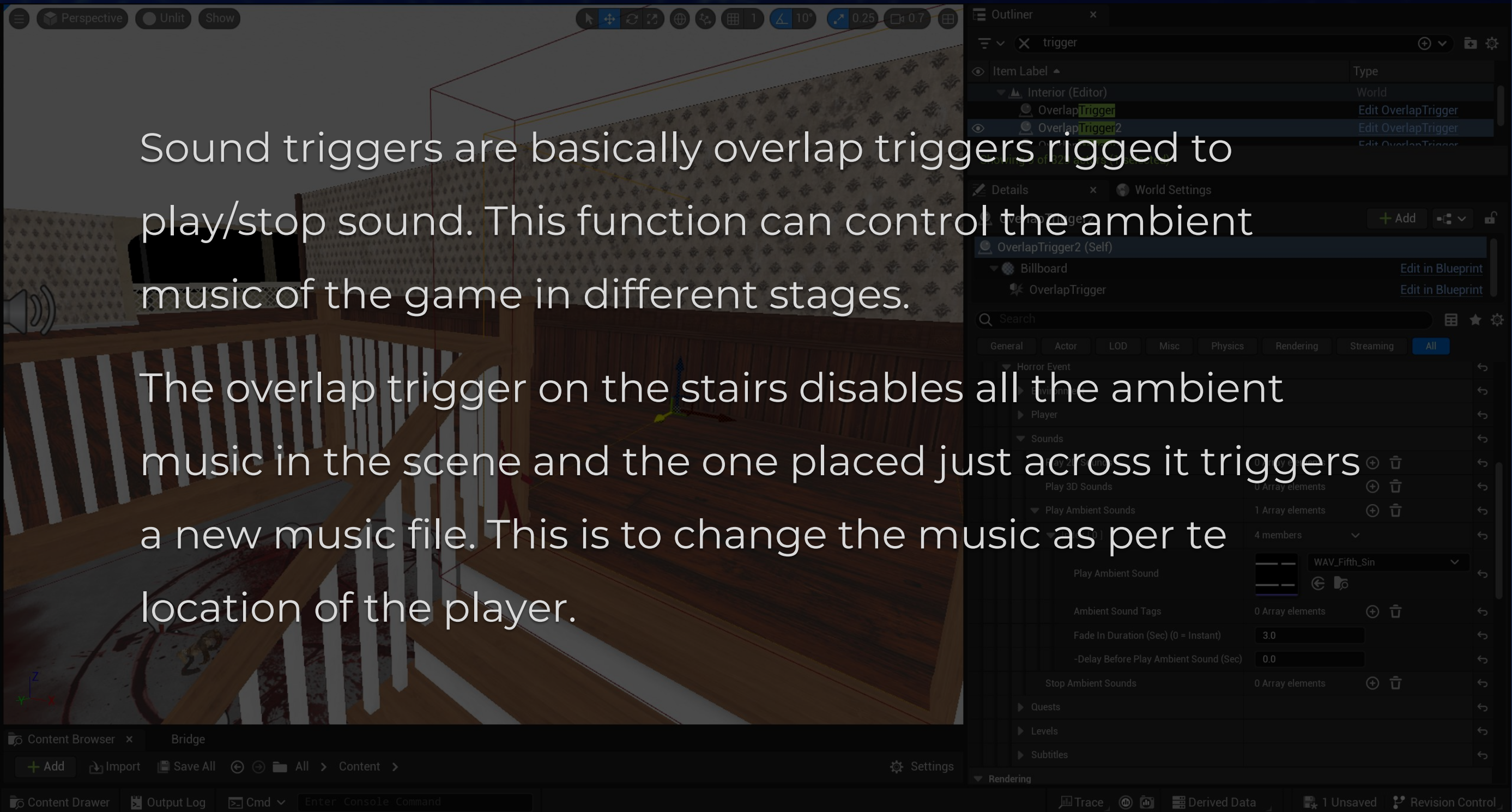
Event triggers are a 3D space in the scene which when overlapped by the player activates certain functions assigned to them. For example, the first overlap trigger activates the explode function of the room light. When the player collider overlaps with the blueprint, the trigger is activated and the function is executed with a delay if provided.



# SOUND TRIGGERS

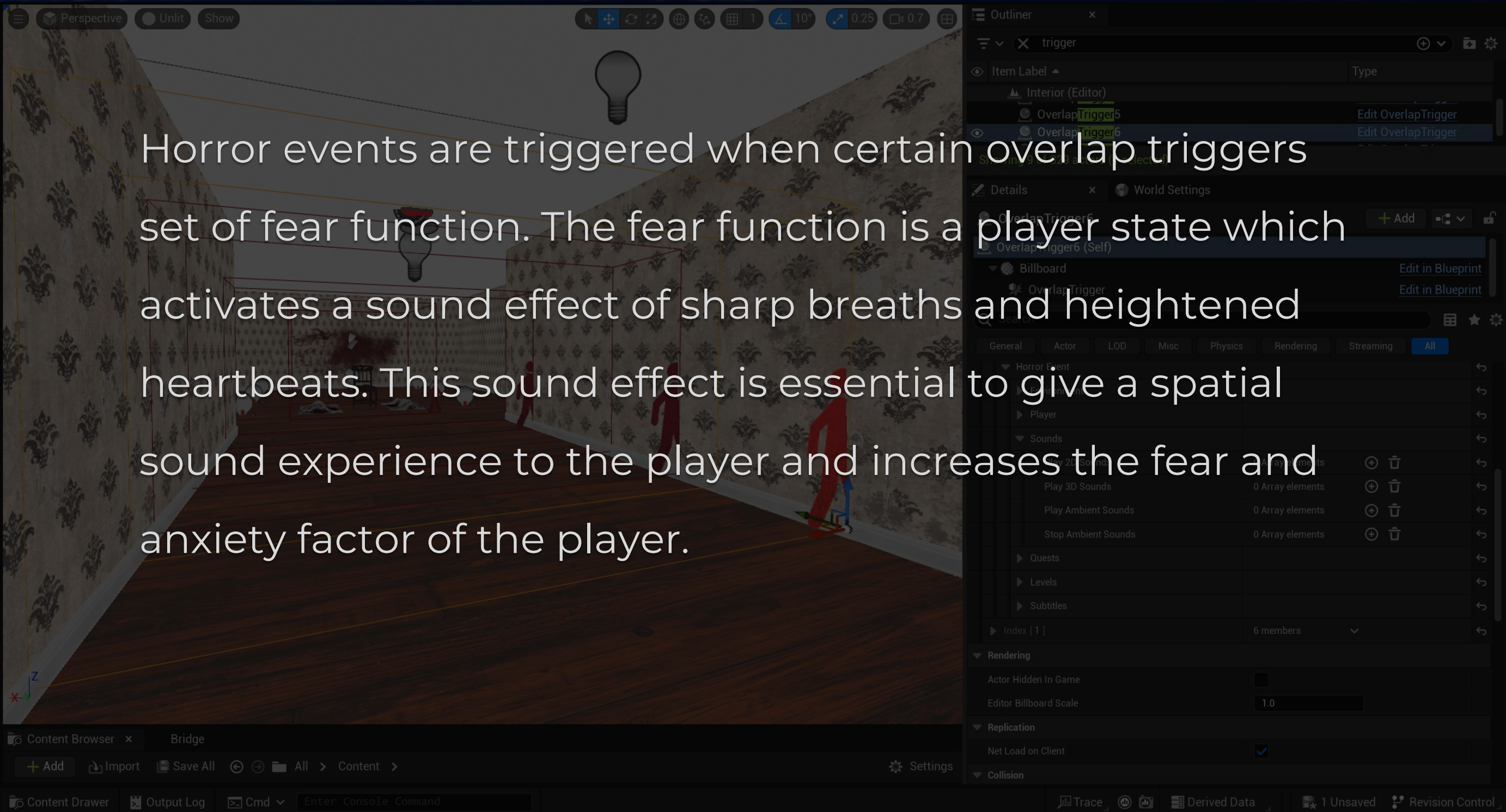
Sound triggers are basically overlap triggers rigged to play/stop sound. This function can control the ambient music of the game in different stages.

The overlap trigger on the stairs disables all the ambient music in the scene and the one placed just across it triggers a new music file. This is to change the music as per the location of the player.



# FEAR/HORROR EVENT TRIGGERS

Horror events are triggered when certain overlap triggers set of fear function. The fear function is a player state which activates a sound effect of sharp breaths and heightened heartbeats. This sound effect is essential to give a spatial sound experience to the player and increases the fear and anxiety factor of the player.



# SOUND DESIGN



EDWARD KARL HANSON

## Fifth Sin



Game Begin Music

Placed as a 2D Music element in the main level.

Triggered as the Play button is activated.



JH COLEMAN

## Primitive Traces



Stage 2 Music.

Triggered when player overlaps with a trigger placed on stairs. This music is more intense and signifies a deeper tension.



# SOUND DESIGN



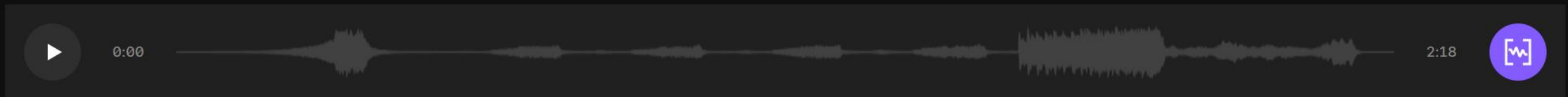
VICTOR LUNDBERG

## Someone There?



End Sequence Music.

Triggered when the last slide door shuts and locks the player inside. This music is combined with heartbeat and breathing sounds for fear effect.



## Scary Stalker Man Talking Horror Sounds (HD) (FREE)

64K views · 1 year ago

LARA'S HORROR SOUNDS

I create visual animations for these videos from scratch, write stories and/or voice sayings, I record these alongside other creepy ...

Radio channel audio. Used this audio as a radio audio to induce a horror effect.

Source- YouTube (LARA'S HORROR SOUNDS)

Source- Epidemic Sound ([www.epidemicsound.com](http://www.epidemicsound.com))

# POSTER DESIGN

Work in Progress

NIGHTMARE

NIGHTMARE

For the poster design, I used stock images from Adobe Stock and blended them together in Photoshop to create a poster for the game. After many iterations, the poster turned out to be very good looking and fearful just as anticipated.

NIGHTMARE

NIGHTMARE

# POSTER DESIGN

Final Poster

# NIGHTMARE



COMING SOON ON STEAM



# MARKETING



# ARTBOOK COVER

