



## Game Design Document

Intended Platform: PC (Online Only)

Target Audience: 16+ for Fear, Horror,  
and Violence

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## Game Outline

The Sidgwick Investigations is a 2-4 player investigative survival horror game where players are tasked with exorcising an unknown monster that stalks them in different Victorian/Gothic inspired locations.

## Game Theme

The Sidgwick Investigations is an investigative horror game, whereby players will be expected to investigate gothic inspired locations to exorcise an unknown monster. Thematically, the game is designed to evoke and maintain low levels of fear from the players as they explore these locales whilst avoiding a stalking monster. Players will experience a range of Victorian and Gothic motifs throughout the game designed to further evoke these feeling of fear during a playthrough, supported by use of sound and audio to provide audio clues as to the player proximity to the stalking monster.

## Context & Backstory

The Sidgwick Investigations takes place in a fictional late 1800's city, similar in look and feel to that of late 1800's London. Players will initially find themselves (after selecting their avatar), in the courtyard of the Sidgwick Institute, a large medieval castle/manor house. This 'Hub' area will allow players to move around whilst a level is being selected from the map.

The games name is an homage to Sir Henry Sidgwick, a renowned British philosopher who also started an institute that explored and investigated the paranormal. A character named Lord Sidgwick is a central NPC in the game who provides, through dialogue, support to the team along with some narrative exposition.

Players will take on the role of members of a team of 19<sup>th</sup> century paranormal investigators tasked with discovering the malevolent creature that is stalking each of the locations, removing its source of power, and ultimately exorcising it to return the house to a normal state of habitation. To accomplish this, players will need to locate and collect a set of collectables whilst avoiding and evading the monster, before finally exorcising it with a weapon.

## Game World and Aesthetic

The Sidgwick Investigations is set in the middle of a fictitious city at the height of an industrial revolution, akin to that seen in late 1800's Britain. As such much of the game's world and aesthetic draws from many of the motifs and architectural design choices of the time. The artistic style of the game is focused on a pseudo-realistic style, taking into consideration the time in which the game is set.

### World Map

Using maps of London in the late 1800's as a starting point, a map for the city was created. The layout of the city sees clusters of houses and districts built up around central points (manor houses, hospitals, and churches) to provide a feel for the scope of the game's world (Figure 1), much like the construction of larger cities during the 19<sup>th</sup> Century. The design of the world map also uses sepia tones, a staple of much of the maps and photography of the time in which game is set and to also provide a visual aid to allow players to identify the period in which the game is set.



Figure 1: World Map (Inkarnate, 2021)

## Level Environments

### The Sidgwick Institute

The design of the Sidgwick institute is based on the design of large stately homes built in 17<sup>th</sup> and 18<sup>th</sup> century Britain. This location is the first that players will see upon launching the game, with the 'Hub' area being the courtyard of said building being the initial area for players to experience and interact with. The courtyard has been designed to link to the overall aesthetic of the game, showing that Lord Sidgwick, a central NPC, is a character of some wealth and respect within the context of the game. Throughout the courtyard there are objects of a paranormal nature to provide further subtext to the players around the history of the manor and to Lord Sidgwick as well as the players own place within the games more ambiguous narrative.

### Grimme Street Town House

Environmental storytelling is a main feature of the game, the levels have been designed to encapsulate the styles of Victorian buildings in terms of their layouts and aesthetic, however there are also strong motifs drawn in from the Gothic novels and short stories written in the late 19<sup>th</sup> Century to diverge from the realism to a degree. The inclusion of medieval torture devices that are present in the dungeon part demonstrate this divergence, as the upper two floor of the building provide the players with the time period's context, whilst the basement area draws in the more medieval aspects that were present in the works of authors such as Bram Stoker, Mary Shelley, Oscar Wilde, and Edgar Allen Poe.

Providing a gothic feel to the level design is a core feature of the game to provide visual clues and visual storytelling to the players, also providing a loose and ambiguous narrative through the design and amalgamation of the time-appropriate level design and the medieval elements that are present in much of the Gothic literature that was written during the period the game is set.

## Multiplayer Dynamics

The Sidgwick Investigations is a 2-4 player cooperative game where the stalking monster's AI will change based on the number of players in a party and will increase in aggression based on how players are progressing with the main objectives in a round.

There is also the potential for a more asymmetric design to be implemented by giving the option for players to control the monster, meaning matches will be a 2-4 vs 1 game, whereby the team would be trying to investigate the monster, while another player tries to hunt them. This would also result in a ranking system for players to be implemented to show wins for individual players as the investigator team and the solo monster making us of a master SQL database. For the prototype demo, however, this has not been included.

## Player Interactions

Players primary forms of interactions are with the available collectables within the game. For the main level, players will explore the level and interact with objects in the house (doors, draws, cupboards, etc) to locate these collectables. Each time players locate and interact with one of these objects the UI and HUD will reflect progress. As part of the stalking monster's design, when players hit certain thresholds, the monster will become more aggressive in its hunting of the players and as such players will need to work as a team to avoid the monster as well as they can.

Players will also be able to interact with two types of power-ups while playing, each of which is designed to support players in their overall goal of exorcising the monster.

Power-up	Effect
Crucifix	Stun locks monster so party has time to get away
Magnifying Glass	Highlights on mini-map location of other important collectibles in level
First Aid Kit	Can revive a player when they are 'downed' by the monster

Figure 2: Available power-ups for prototype version

Players will also have access to lanterns, that they will be able to use while playing through levels. To help build the tension during a round however, the lanterns will have a timer on them meaning that players will need to work together to ensure they are able to properly investigate the levels. All collected items will also be held in each player's inventory, allowing them to keep track of available items.

Player's will also be able to interact with another through in-built voice communication within the game, enabling them to effectively communicate with their team without the need for additional software to be used. This particular system is, however, not included in the prototype version of the game.

## Player Balancing

In terms of balancing players, all players will be basic humans with no specific skill set or class system.

Balancing comes into play with the power-ups available to characters (Fig 2). Each of the power-ups provides players with a temporary perk (being able to show potential collectables on a mini-map or defending against the monster). When designing these perks, the goal is to provide players with a brief respite without lowering the tension created by the game and the stalking monster in a way that supports the players being able to meet the win conditions. To balance these power-ups properly, players will need to locate them in the level whilst avoiding the monster, and to also work with their team to determine the best use for these in terms of when and where during a match.

The AI of the monster also works to support players in these choices, as players will only have a limited number of power-ups and the monster will become more aggressive as players move closer to the end goal of the game. The design of the Monster’s AI works to support players in working out when to use the power-ups as the monster will be more aggressive (faster movement towards players) as they progress.

In terms of the power-ups themselves, they have been balanced to only work for specific amounts of time both in terms of being able to locate the collectables for the goal and to stun the monster into not pursuing players (Fig 3). These power-ups only have temporary uses to support the overall theme of the survival horror aspects of the game, whereby the goal is to ensure that tension and player fear is maintained throughout.

Power-up	Effect	Balancing
Crucifix	Stun locks monster so party has time to get away	Can only hold one power-up at a time. Only last for 5 seconds. Single use item. Players that collide with monster can still be 'downed'
Magnifying Glass	Highlights on mini-map location of other important collectibles in level	Can only hold one power-up at a time. Only last for 20 seconds. Single use item. Only shows up on the player who uses its mini-map
First Aid Kit	Can revive a player when they are 'downed' by the monster	Single use item, can only interact with when downed.

Figure 3: Balancing for each available Power-Up

In terms of broader design development, there is scope here to convert these power-ups into a class-based system that would lead to players need to choose which class to play as. There is also scope within these designs to consider other power-ups that would be equally balanced to support players. As part of the class system, as detailed in Figure 4, each class would have a unique ability that can be used on a 60 second cooldown, along with a more useful single use ability. These mechanics have not been included in the demo version of the game.

	Medium	Detective	Priest	Trickster
On 60 second cooldown	Has the ability to locate and see the Monster anywhere on the map for 20 seconds.	Ability to highlight 2 clues in a room for 1 minute along	Ability to stun the monster for 10 seconds	Can throw objects that redirect the monster to that location
Single Use	Can cloak self from monster (can't be attacked) for 10 seconds - reduced movement speed	Can open any hidden passageway in current room (if there is one)	Can revive fallen ally without medkit - takes 4 seconds	Can trap monster for 10 seconds - Can trap ally

Figure 4: Class System Mechanics



## Characters

### Characters

#### Lord Sidgwick

The Sidgwick Investigations has one central character – Lord Sidgwick. Lord Sidgwick is loosely based on Sir Henry Sidgwick, a renowned philosopher and paranormal enthusiast who was active in the late 1800’s. The character of Lord Sidgwick is only ever heard in game and will not be seen by players.

He is an older gentleman from the northern part of the fictional country the game is set. Player will know this based on his broad Yorkshire accent when he is relaying information to players. He is a stoic and calm individual whose role is to provide the players with information regarding their assignments through carefully crafted dialogue. He is a character shrouded in mystery, however, acts as a guide for the players at the start of each mission (round of the game) along with providing useful information.

In terms of his role within the game, Lord Sidgwick can be characterized as an unreliable narrator, providing the team with vague and ambiguous information around each of the monsters that players will be investigating.

In terms of more broad development, there is the possibility that, in terms of a more developed narrative, that Lord Sidgwick could become a more antagonistic character as players complete more missions. This could be done through his giving players less information or incorrect information about the monster they are trying to exorcise from the locale.

#### Player characters

Players, upon signing into The Sidgwick Investigations, will be given the option of the avatar they most wish to play as (Fig 4). Each of these avatars, has a specific backstory and personality that could be introduced into the game through further dialogue.

Regarding their stories, each character has specific motivations as outlined in Fig 5 developed using Arcweave, 2022.

Arthur	David	Elizabeth	Helen
<p>Experienced experts in deduction and observation, Arthur is an invaluable member of the institutes investigative teams.</p> <p>Having spent a decade as a detective for the Met, Arthur joined the institute after working with Lord Sidgwick to solve a particularly gruesome series of murders.</p> <p>Play as Arthur?</p>	<p>David is talented and devoted spiritual leader with an innate ability to defend against all of the occult.</p> <p>A former senior clergyman, David now work for The Institute to rid the world of foul and malevolent forces that have stalked his nightmares since he was a child, a point where he looked to god as a form of protection.</p> <p>Play as David?</p>	<p>Elizabeth is a gifted and talented Medium, Elizabeth came to the attention of Lord Sidgwick following her work with one of his investigators in solving a particularly nast haunting of a young family.</p> <p>Since then, Elizabeth has worked to protect more families from the dark creatures that stalk the night.</p> <p>Play as a Elizabeth?</p>	<p>A former assistant to a circus magician, Helen is very familiar with the ways in which one can deceive the supernatural creatures.</p> <p>She joined the institute after Lord Sidgwick rescued her from a supernatural entity that murder her former colleague and she was accused of his murder by the circus ringmaster.</p> <p>Play as Helen?</p>

Figure 5: Character Designs

## Avatars

To ensure there is diversity among characters in the game, players are given a basic selection of 4 player avatars. This provides a choice of which avatar they most appropriately associate with based on a very small variable – skin tone. The avatars all have a very similar looks in terms of attire, this demonstrate that they are all on the same “level” as one another and removes and form of potential classist biased that may have been present in the late 1800’s along with providing players with a sense that all avatars are members of a specific organisation. To better link the avatars to the games more gothic themes, they all appear in late 14<sup>th</sup> century half robes, providing players with a sense that the uniforms for the institute are styled in a more classical manner, tying into the ways in which the gothic genre of literatures blends the style of the late 1800’s with the ideas of both the original gothic movement and medieval motifs – detailed in Figure 6.

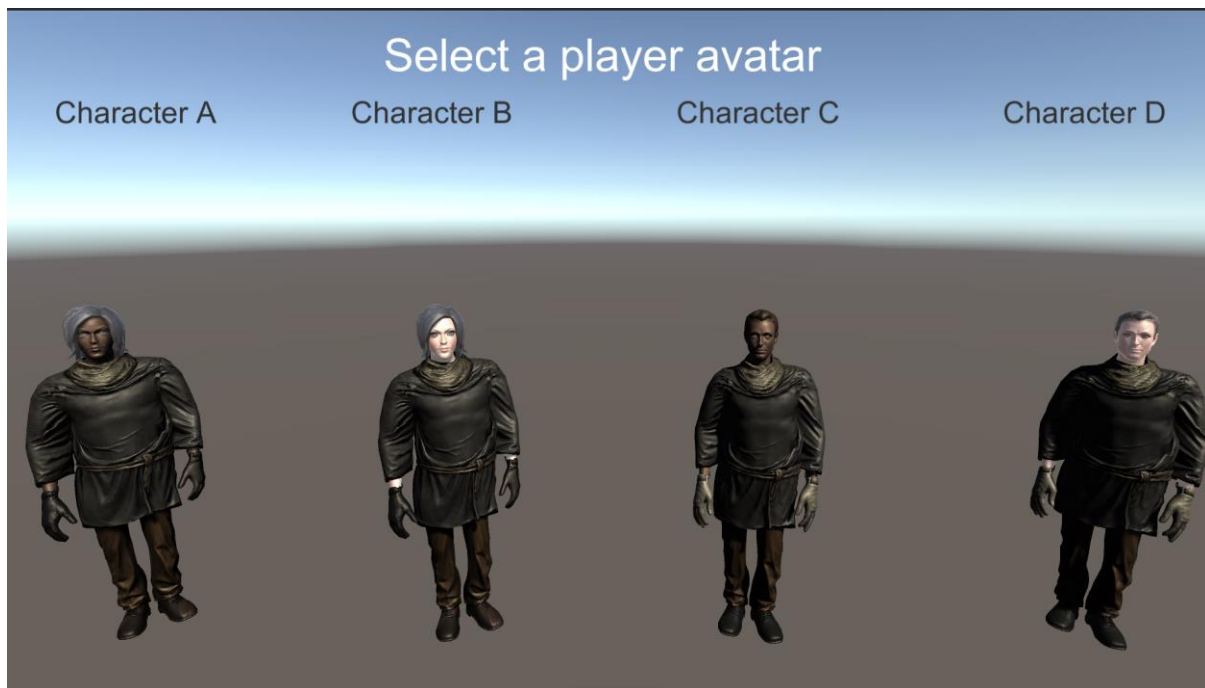
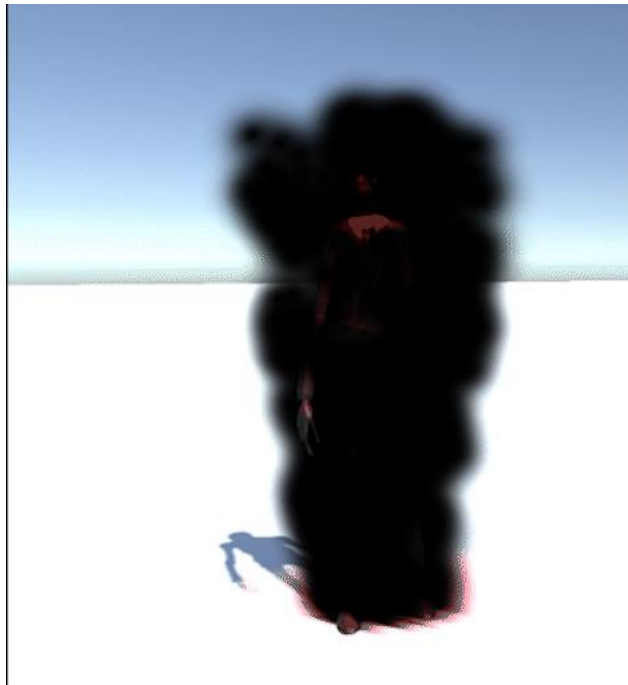


Figure 6: Character Avatar Models

## Enemy

Taking inspiration from a range of games across the survival horror sub-genre of games, and to allow for the players to investigate the monster, it has been designed as a stalking, unknown enemy controlled by an adaptive AI.

The design of the creature is based on a 3D Slenderman model (NVJOB, 2020) that has been adapted using a particle emitter and point lighting to produce a stalking creature that will be visible to the players from a short distance away due to its glowing red eyes (Fig 7). The decision for this is, again, based on the ways in which unknown monsters and paranormal creatures are described in a range of gothic fiction as being distorted, often through fog, with piercing red eyes. The aim behind the monster's design is one to evoke fear in the players as it stalks them around each level. The monster has also been designed to emit a series of loud footsteps whilst it is stalking the player team, these sounds become louder as the monster comes closer to the player and is another example of how the games design is linked to the theme, and how the monster's movements can be tracked by players during gameplay.



*Figure 7: Monster NPC Design*

Early designs for the game had a much more investigative aspect to gameplay, and the monster is at the centre of this. On top of the team having to locate collectables, part of early gameplay designs (not included in the prototype) include the collectables being clues that will lead them to determining the type of monster based on archetypal monsters seen in gothic literature (Vampires, Werewolves, Witches etc). This potentially enables a much more broad and varied game experience by adding an additional gameplay thread that can be further explored in later development builds.

## Gameplay

The core gameplay loop for The Sidgwick Investigations is for players to explore a level whilst avoiding and evading a stalking AI monster and collecting a series of collectable objects known as “collectables” to weaken the monster, before winning the game by killing it (Fig 8).

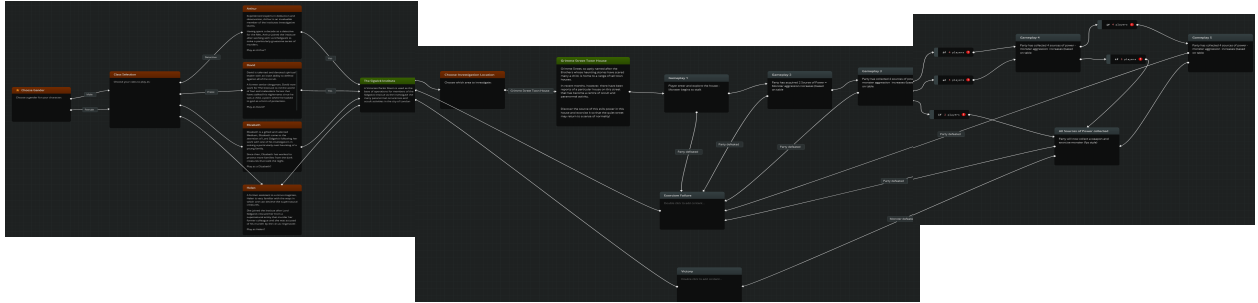


Figure 8: Arcweave Gameplay loop – a larger version of this is included in Appendix 1

### Objectives, rewards and win conditions

The central objective of each match in The Sidgwick Investigations is to ultimately “exorcise” the monster that is haunting the level. To do this, players need to work together to find and collect a series of objects scattered around the level to weaken the monster – these are known as “collectables”. The number of these items needed to win the level is determined by the number of players in the party, however, will never be greater than 8 (based on a full team of 4 players). Following the successful collection of all the “collectables”, players will then be given the opportunity to “exorcise” the monster by shooting at it with a weapon. This final part of the central objective is required for players to meet the win conditions for the match, however during this final showdown with the monster, players will need to be aware that it’s aggression will be at its highest.

In terms of rewards, there is scope for a player level system to be brought into the game to allow for players to achieve experience for every match they have successfully completed which could open potentially broader skills and perks/power-ups available to players in the game, as discussed in the “Balancing” section of the Multiplayer Dynamics section of this document.

### Challenges, penalties, and loss conditions

The main challenge that players will come across during gameplay is the AI Monster. The monster is programmed to stalk the house randomly and chase players when they are in its line of sight. Sound design is used with the monster to give players feedback on where the monster is, roughly, in terms of their location by footsteps getting louder as the monster comes closer to the player. The monster, until players have collected all the “collectables”, is invulnerable meaning players are forced to avoid and evade the NPC, and as player gather more of its “collectables” it will become increasingly more aggressive, moving faster around the level, and seeking out the closest player (Fig 9 & 10).

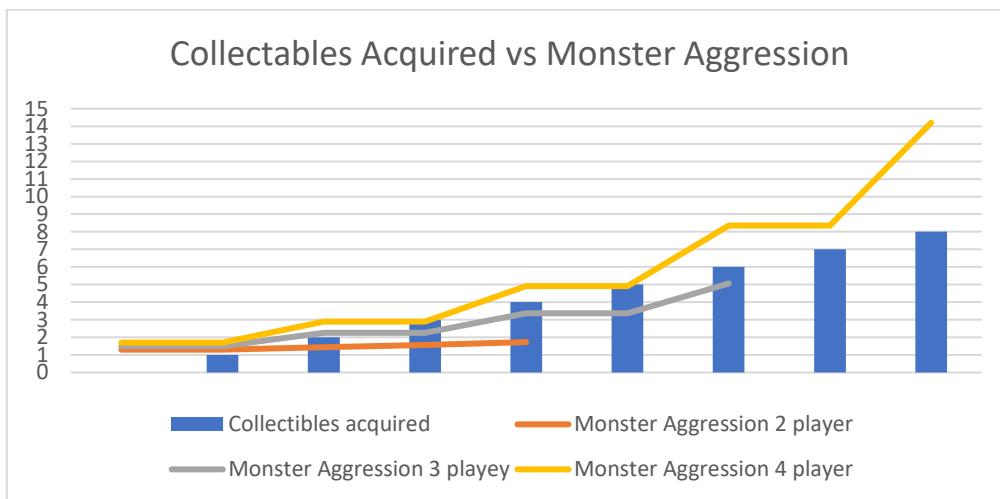


Figure 9: Objective Collectables Acquired to Monster Aggression

	2 players	3 players	4 players		Collectibles acquired	Monster Aggression		
	1.3	1.5	1.7			2 player	3 playey	4 player
Health (number of attacks with located weapon)	1	2	3	Start		1.3	1.5	1.7
Agression increase after 2 of 4 clues found	*1.1	*1.3	*1.5	0		1.3	1.5	1.7
				1		1.3	1.5	1.7
				2		1.43	2.25	2.89
				3		1.573	2.25	2.89
				4		1.7303	3.375	4.913
				5			3.375	4.913
				6			5.0625	8.3521
				7			8.3521	8.3521
				8				14.19857

Figure 10: Table of design details on Monster Aggression, variables, and movement speed

If the monster does catch a player, the player will be “downed” in a state of reduced movement speed and will not be able to interact with collectables nor power-ups. This penalty for failing to avoid the monster will be in place until the other members in the player party uses a first aid kit on the “downed” player allowing them to resume regular gameplay. This mechanic also dictates the lose conditions, for if all players are put into the “downed” state, then the team will be considered to have lost the game and they will be loaded back into the courtyard level to start a new match.

Considering the development of the prototype into a larger, complete game there is significant scope for the addition of traps and potentially smaller enemies that can impede player progress such as enemy NPC’s that can steal back the “collectables” to provide a greater variation to gameplay and will be joined with the additional power-ups and perks to enable players to defeat these smaller NPC enemies to maintain balance in the game.

## Level Design

For The Sidgwick Investigations there are 2 designed areas that players will interact with. The initial 'hub' area (the Sidgwick Institute) and the Grimme Street house level.

### The Sidgwick Institute

The Sidgwick Institute hub area is where players are taken after the initial character selection screen. The aim here was to take the layout of courtyards that were often attached to large stately homes from the 18<sup>th</sup> Century to provide players with an area that can be used for navigation while they are deciding which level to select from the map asset on one of the walls (Fig 11).

The level itself is not designed to do anything and is heavily inspired by the garage area seen in Phasmophobia (Kinetic Games, 2020) whereby players can get to grips with movement controls and basic interaction buttons. The idea here is to give players a space where they can explore and check movement controls before heading into the main levels. The area works as a very rudimentary onboarding area ahead of players being taken into a complete level.

To ensure that the level has the correct pseudo-realistic feel the courtyard has been design with a more medieval inspired aesthetic as often described in many forms of gothic fiction to highlight to players the intention and thematic stylisation of the main levels themselves that mix both the architecture of the late 19<sup>th</sup> century with aesthetic and stylised choices tied to those of medieval periods.

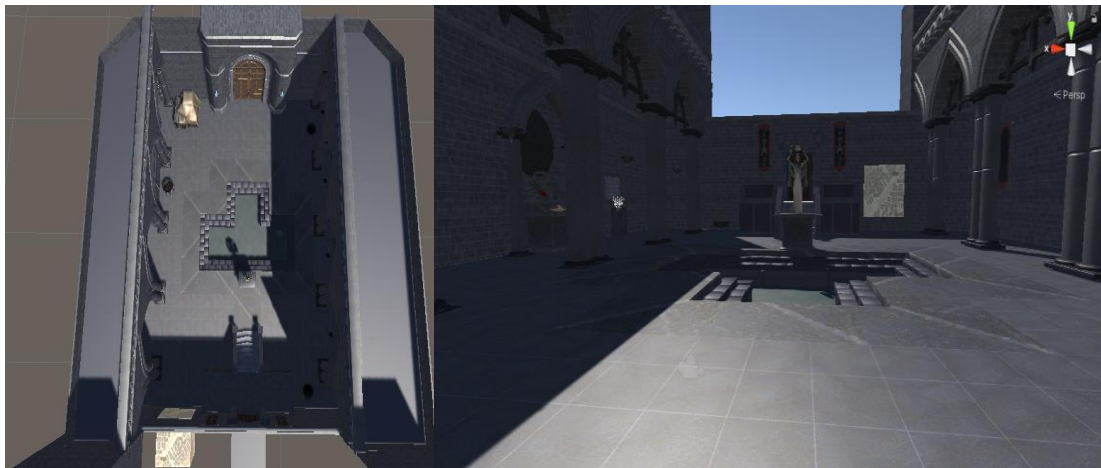


Figure 11: Layout of The Sidgwick Institute

### Grimme Street Townhouse

The Grimme Street Townhouse is the main level for this version of The Sidgwick Investigations. The design of the level itself (Fig 12) follows the designs of larger townhouses constructed in Britain in the late 18<sup>th</sup> and early 19<sup>th</sup> Century. Original plans incorporated some plans taken from a range of sources including Edwardian Promenade, 2011 which has a more authentic set of floorplans that are used as a source of inspiration for the design of this level.

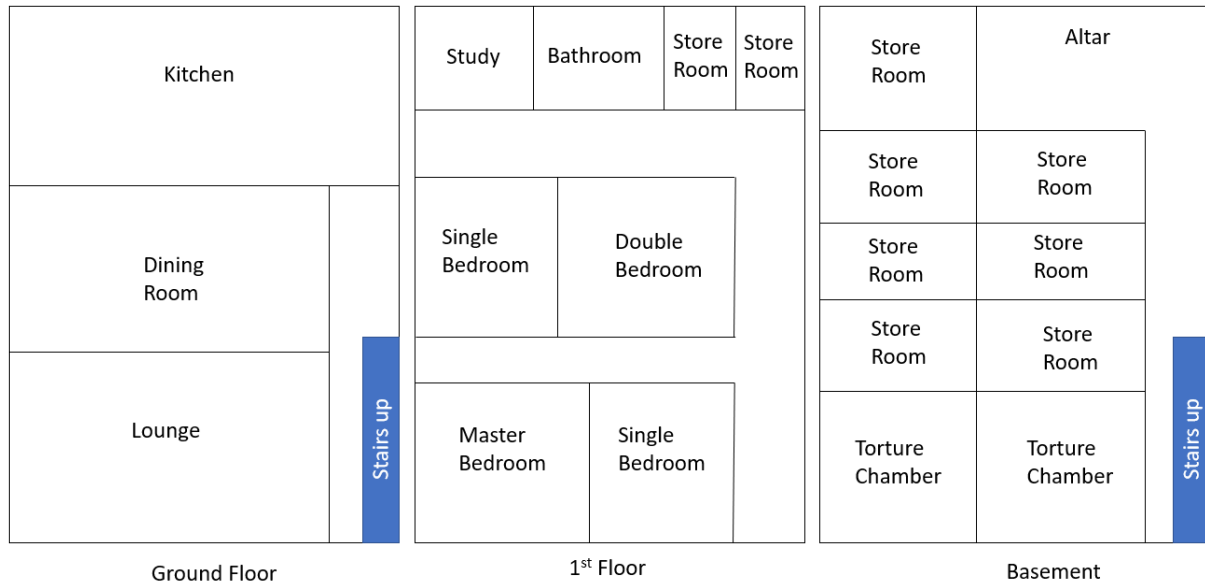


Figure 12: Floorplans for level – based on research

The design of the levels is split across the 3 accessible floors; a standard ground floor and 1<sup>st</sup> floor along with a more labyrinthine basement (Fig 13). Players are tasked with finding a set number of collectible items that are needed to for them to progress and ultimately exorcise the monster to win the game. The design of the level is to allow players to explore, whilst also giving them options to use to evade the stalking NPC by giving many of the room’s multiple entrance/exits. Many of the rooms on the upper most floor is designed as they would be in a regular house, with single entrance/exits to them. This is to allow players to think about how they will explore the house and use potential power-ups in these situations, should the monster be near them.

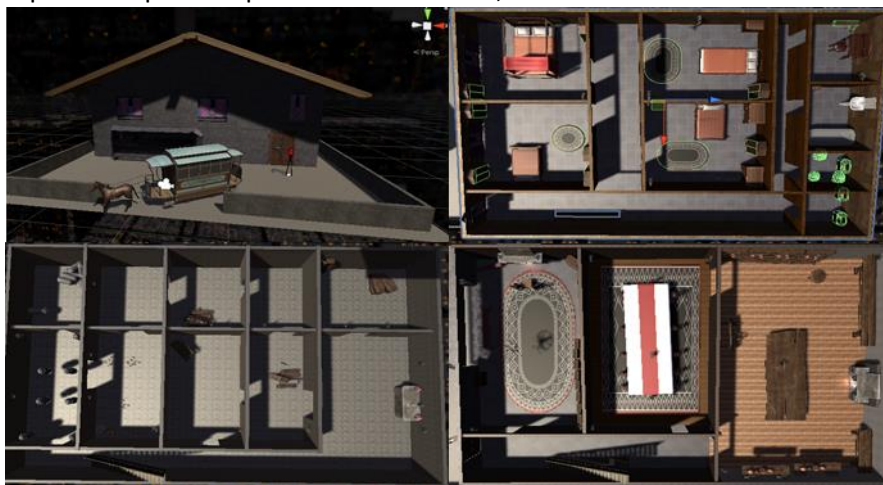


Figure 13: Final Level Design

The level itself does not have any discreet obstacles as it were, they instead are designed to support player exploration in what can be simplified to a treasure hunt game, mixed with survival horror elements. As such the level is a vertical design that encourages players to explore. The labyrinthine design of the basement however is more akin to what is seen in some larger AAA survival horror games such as Resident Evil and Resident Evil 7: Biohazard, a series of smaller rooms that are interconnected in some way (Capcom, 1996) & (Capcom, 2016) along with some ideas for creating multiplayer maps from Dead by Daylight (Behaviour Interactive, 2016) .

Looking at additional levels, the below table details some of the ideas for a variety of additional levels that can be added to the game to provide a greater variety in environments that can be explored by players (Fig 14).

Location	Map Size	Features and overview
Ivy Manor	Large	Large, abandoned manor house. 4 Floors (Ground, 1st, Attic, Basement). Large labyrinthine design, secret rooms, and switch puzzles to open new areas. Secret passageways to allow for alternative routes. Keys needed to open certain rooms
Saint Jude's Sanatorium	Large	Large disused sanatorium. 3 large floors. Many separate rooms, single entrance/exits. Locked basement - opened with key on 1st floor. Narrow corridors, tight corners (low field of vision)
Hope Street Slums	Small	Small 2 story house. Simple ground floor - open plan with small kitchen. Smaller upper floor. Lots of areas players can be caught, few routes of escape - furniture can be used to 'kite' monster
St Paul's Cathedral	Medium	Medium-sized cathedral. Open plan ground floor with office area at the back, mezzanine level (narrow walkways) comprises upper floor, basement level - more labyrinthine in design, lots of small, interconnected rooms (opened with a statue puzzle)

Figure 14: Additional Level Design Ideas



## Onboarding

The onboarding process for The Sidgwick Investigations will be done through organic gameplay with HUD related support, and without a discreet tutorial in-game. When considering how best to onboard players, a range of ideas were initially considered, including a tutorial level that introduces players to core gameplay mechanics, however, to give players a better, more streamlined experience, the onboarding will take place within the main game itself.

To that end, the opening dialogue players will hear from Lord Sidgwick will not only introduce players to the narrative backstory of the location but will also guide players as to what the main goals are through carefully constructed dialogue that alludes to these mechanisms of gameplay. The idea behind this is to allow player to, in keeping with the investigative thematic elements, try things out for themselves and learn through playing, rather than have the game “hand-hold” them through a carefully constructed and scripted tutorial sequence.

If a player joins a game in progress, they will hear the same opening dialogue upon loading into the game, this will provide them with the same information the team members that are already in the game will have received when the match started. This is then supported by the UI information that presents players with a counter as to the number of “power sources” the party has collected, giving late joiners a rough idea how aggressive the stalking monster is and how close the team is to winning the match.

To further support players, there will also be button key prompts on the UI to enable players to quickly identify necessary input commands during a match.

## Sound Design

Drawing on tropes from the wider horror genre across different mediums, the games sound design has been a central to the design process. As opposed to having a full and immersive score with a range of movement, The Sidgwick Investigations instead makes use of a range of sound effects to immerse players in the game and drive the games horror themes.

The design of the sound occurs in 3 distinct ways:

- Background sound effects
- The monster enemy
- Voiced dialogue

### Background Sound Effects

Thematically, The Sidgwick Investigations is a game to evoke fear from players and as such the background sound effects have been designed to subvert this. To provide players the sense that they are in a large city in the middle of an industrial revolution, the background sound effects heard are designed to evoke a sense of a bustling city at night. This design should actively juxtapose the isolation that players should feel upon investigating the levels available in the game. The sound effects for the outside world will still be audible to player as they explore the house, however they will be less clear and muffled to then work to elevate the players senses of isolation during the core gameplay loop.

### Monster Sound Effects

One of the main goals within the game is for players to weaken the stalking monster by avoiding it wherever possible. To help players locate the monster, and to also increase the tension within gameplay, the monster, when moving, will emit loud stomping footsteps. This design choice has two purposes; to support the players in trying to locate and thus avoid the monster, and to raise tension.

The idea behind these footsteps being constantly audible when the monster is moving is based on tension being linked to anticipation and can be seen working in games such as Resident Evil 2 and Resident Evil 8: Village (Capcom, 2019) & (Capcom, 2021). The sound of heavy, stomping footsteps from certain enemies in these games often lead players to being able to roughly locate where this seemingly invincible enemy is, while at the same time leading to increased tension as players need to find a way to avoid them. This principle is what has led to the design of this aspect of sound design for The Sidgwick Investigations to provide player with direct feedback as to the position of the monster during a match.

### Voiced Dialogue

Dialogue and voiceover are the single form of narrative exposition present in the narrative aspects of The Sidgwick Investigations and as such the design of this sound element is paramount in terms of the telling of the ambiguous and vague narrative. To that end, the development of this aspect of the sound design is focused on both the delivery of the voice lines from the voice actor and the ways in which the clarity of the lines is implemented in the game. Despite the character of Lord Sidgwick being northern, the script relies heavily on standard English with very minimal colloquialisms to ensure that what is communicated to the player is clear, in terms of the design for the voice over line, filters to reduce background noise and improve overall voiceover quality have been implemented. In terms of this dialogue being delivered to the player, the voiceover dialogue is delivered over the top of the background sound effects at a higher volume to ensure that the dialogue is clear for the players to head when playing the game (Appendix 2).

## User Interface

To ensure that players are as immersed in the game as possible, the UI and HUD design for TIS is designed to be as minimal as possible (Fig 15)

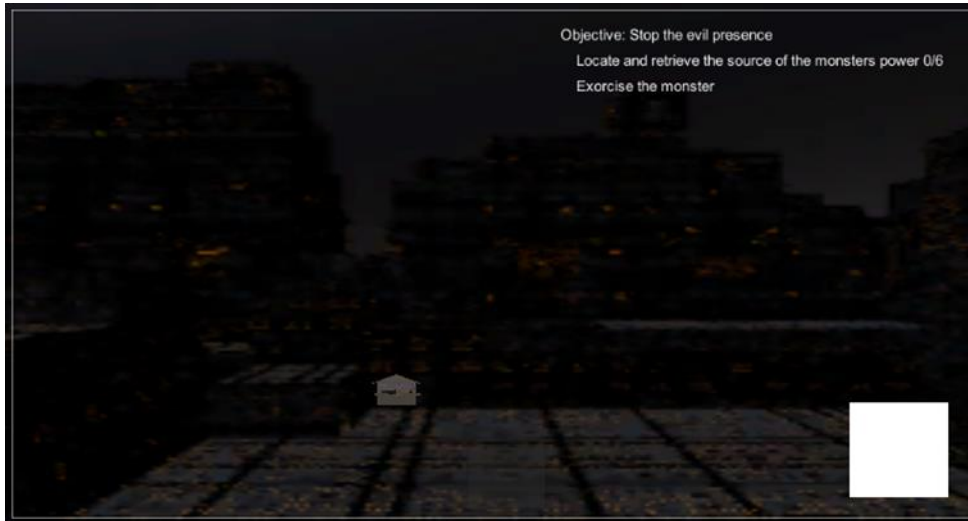


Figure 15: UI Design

The UI is designed to provide players with all the information needed in a way that is as unintrusive to the game's themes and overall feel. To that end, the design of the UI was centred around the simple question of "What does the player need to know when playing?". This central question led to a minimal, yet support UI being developed.

The bottom bar (Fig 16) is designed to show players which one of the two available power-up they have access to when they pick them up. As explained in the "Multiplayer Dynamics" section, players are only able to carry one power-up at a time to support the survival horror aspects of the overall design. The number on the bar associates to the number buttons on a keyboard that are used to make use of this power-up during gameplay.



Figure 16: Skill Button

The mini-map (Fig 17) is designed to allow players that use the appropriate power-up to be able to identify where the collectables (other power-ups, health kits and “collectables”) are in relation to the player position. To further support the need to players to communicate while playing, this part of the UI will only work on one player’s mini-map meaning they will need to communicate with their team if they are unable to get to the location.



Figure 17: : Mini-map

The quest tracker (Fig 18) is determined to track the number of “Collectables” the team have collected during the game. This should sync across all team members to ensure that all players know how many of the objective collectables have been collected and will also help the teamwork out which stage of hunting the monster is at.

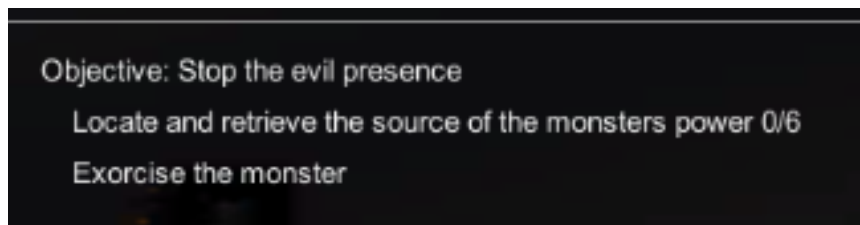


Figure 18: Objective list

## Monetization

The Sidgwick Investigations lends itself to some forms of monetization when exploring additional content that can be added to the game as detailed below:

Form of Monetization	Rationale & Benefit
Base cost of the game	Having completed some market research into the cost of similar games available on PC, the base cost of the Sidgwick Investigations will be between £12.99 and £18.99. Based on the style of this game it is unlikely that there will be a deluxe or premium edition.
Cosmetic options – additional avatar choices and skins	Through an online cash store, players could be given the option of different player avatars and outfits for them. These pieces of additional content will provide players a wider range of stylised outfits that can be applied to the avatars, along with providing alternative ones to the base game. These items will provide no in-game benefits to ensure players continue playing content and to ensure the game does not follow a “Pay to Win” ideology.
Additional Content	As some of the main inspiration for this game comes from the original Gothic horror literature of the 19 <sup>th</sup> Century, there is potential for the addition of paid additional content that adds licensed monsters (Dracula, Jekyll and Hyde, Frankenstein, Sweeney Todd) to the game. These additional monster packs would be charged at a premium to support both the licencing fees needed for the monsters, and to also support future developments. These pieces of additional content could also be released as narrative driven additional content that also come as part of large DLC packs that also have new maps with them too. This would provide player the choice of expanded maps for the game, as well as just additional monsters to hunt.

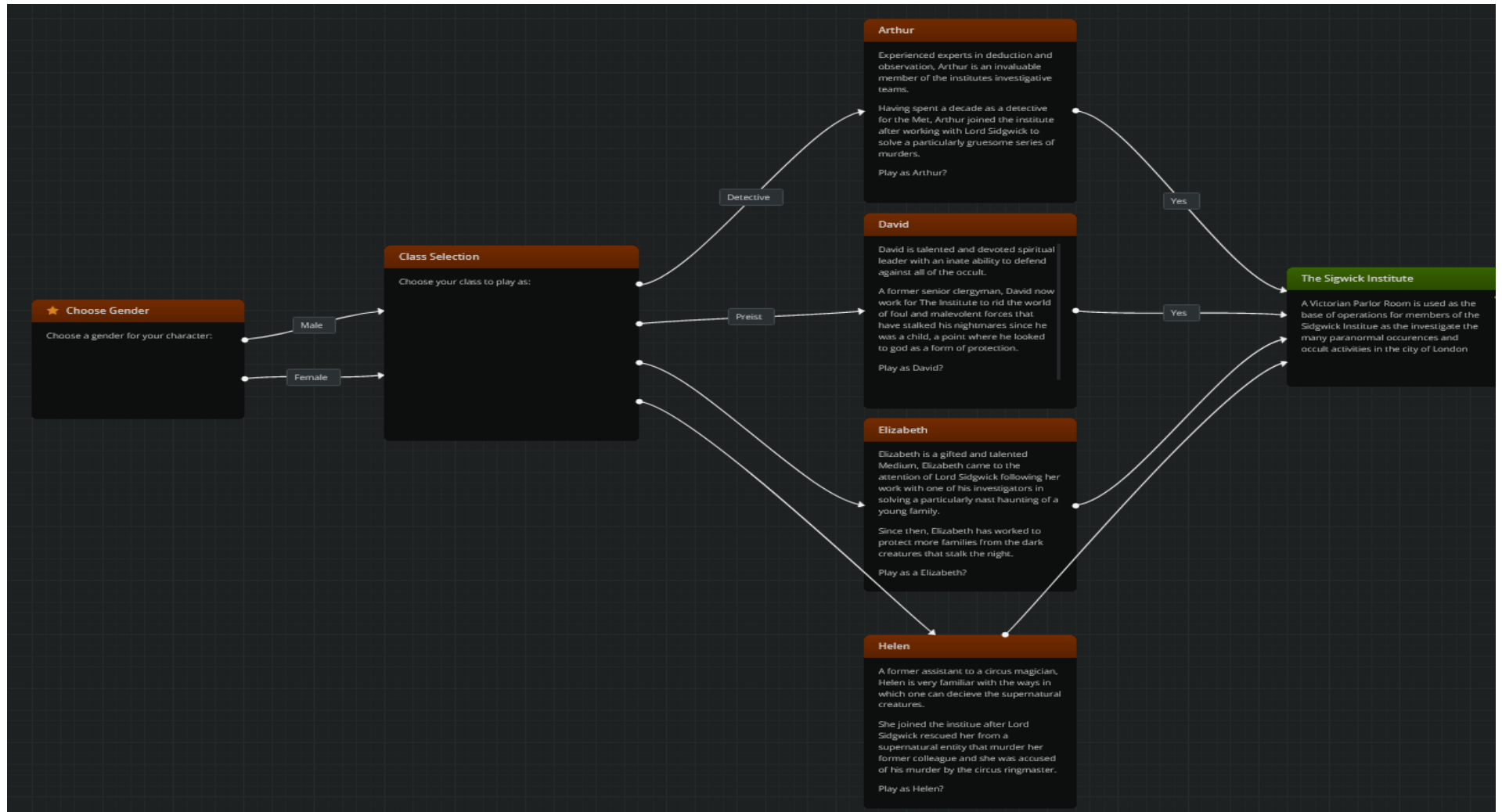
## References

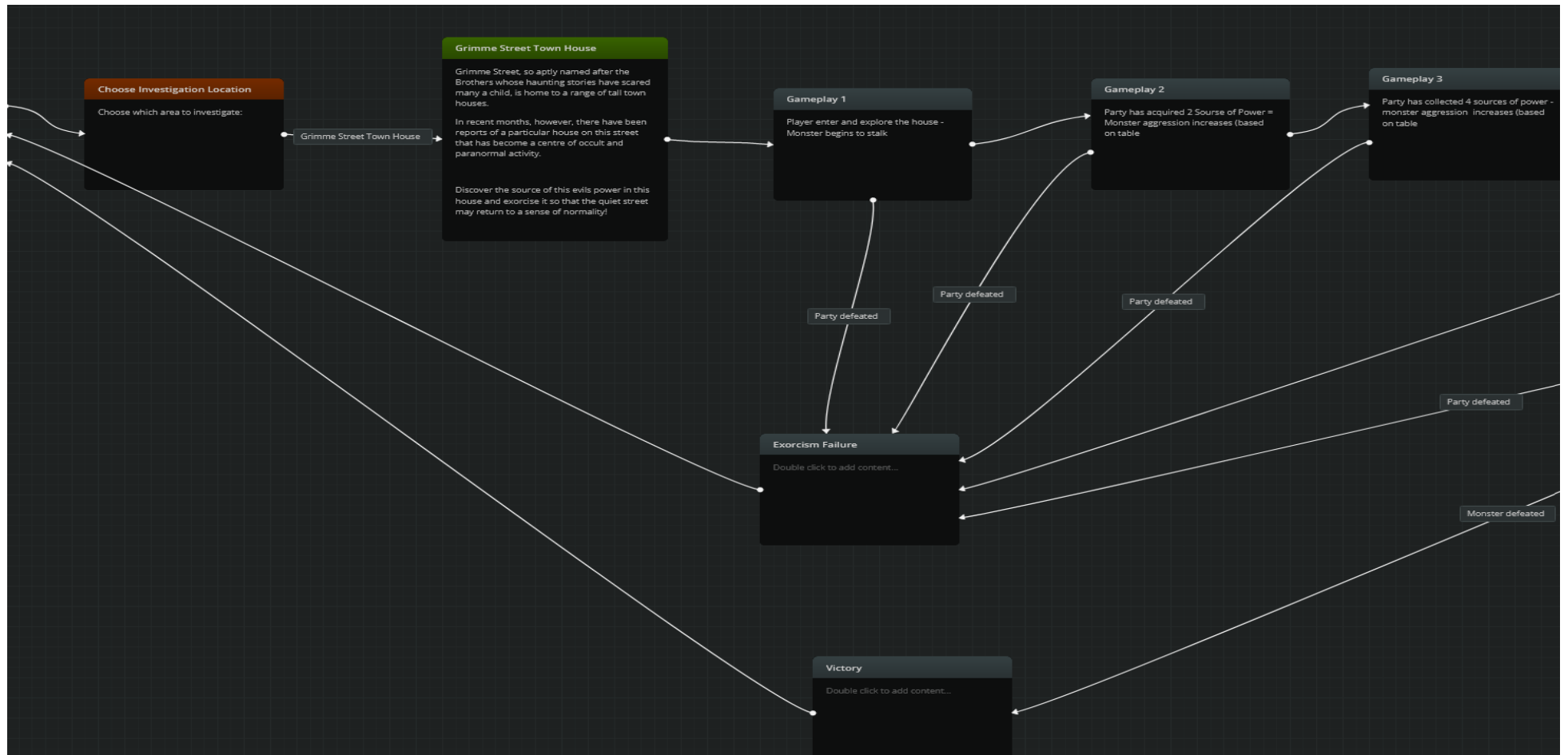
- Arcweave, 2022. *Arcweave | Online game design team collaboration tool*. [Online] Available at: <https://arcweave.com/> [Accessed 26 January 2022].
- Behaviour Interactive, 2016. *Dead By Daylight*. Montreal: Behaviour Interactive.
- Capcom, 1996. *Resident Evil*. Osaka: Capcom.
- Capcom, 2016. *Resident Evil 7: Biohazard*. Osaka: Capcom.
- Capcom, 2019. *Resident Evil 2 - Remake*. Osaka: Capcom.
- Capcom, 2021. *Resident Evil 8: Village*. Osaka: Capcom.
- Edwardian Promenade, 2011. *Edwardian Interiors: An Edwardian Town House – Edwardian Promenade*. [Online] Available at: <http://www.edwardianpromenade.com/interior-design/edwardian-interiors-an-edwardian-town-house/> [Accessed 8 March 2022].
- Inkarnate, 2021. *Inkarnate*. [Online] Available at: <https://inkarnate.com/maps/> [Accessed 3 March 2022].
- Kinetic Games, 2020. *Phasmophobia*. Southampton: Kinetic Games.
- NVJOB, 2020. *NVJOB Slender free VR / AR / low-poly 3D model rigged | CGTrader*. [Online] Available at: <https://www.cgtrader.com/free-3d-models/character/fantasy-character/nvjob-slender> [Accessed 27 February 2022].
- Poe, E. A., 2017. *The Edgar Allan Poe Collection*. 1st ed. London: Arcturus.
- Shelley, M., 2003 (1818). *Frankenstein*. Third Edition (Revised) ed. London: Penguin Classics.
- Stoker, B., 2003. *Dracula*. 3rd (Revised) ed. London: Penguin Classics.
- Wilde, O., 2008. *The Picture of Dorian Gray*. 2nd (Revised) ed. London: Penguin Classics.

## Prototype Asset References

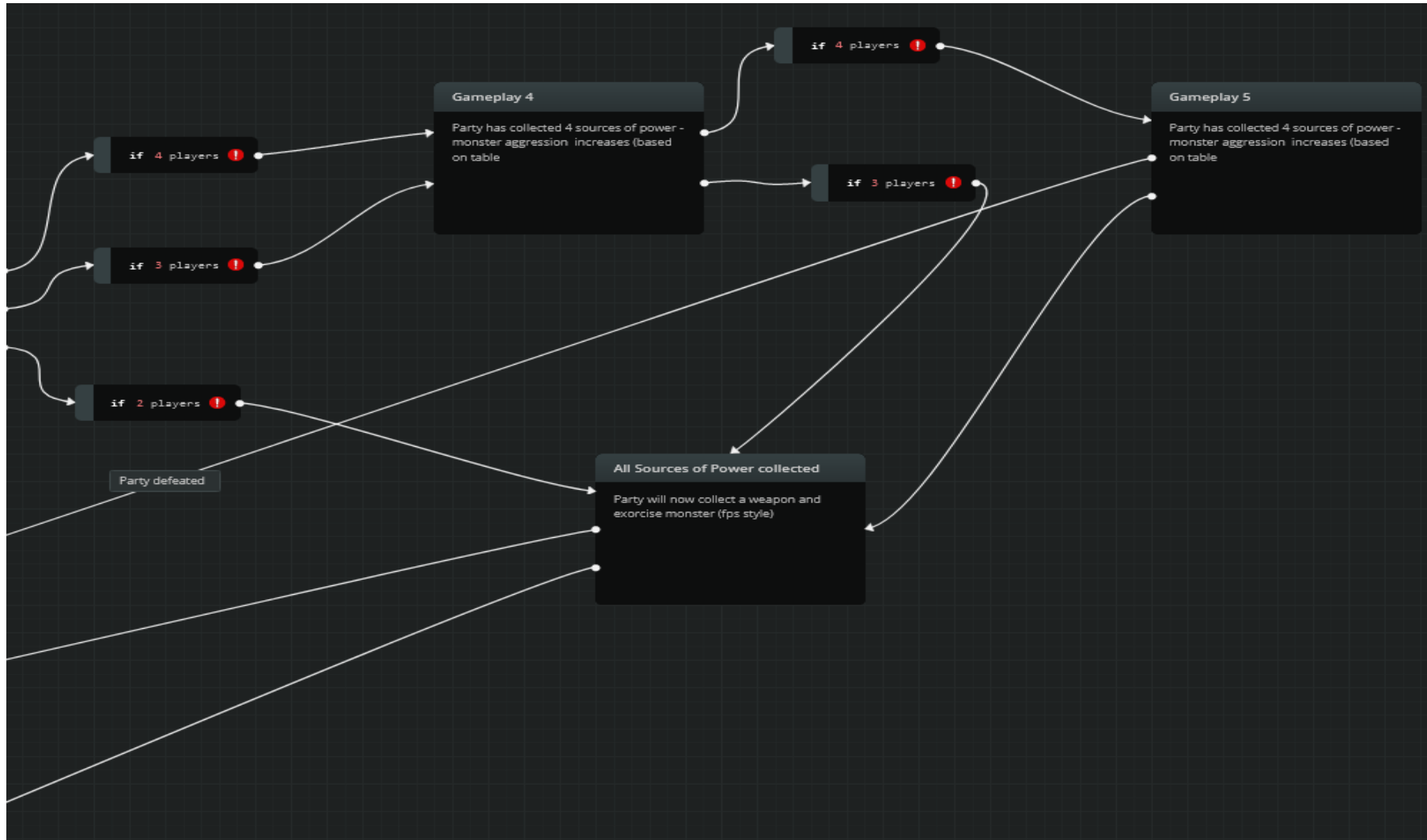
- Atmospheres, P., 2018. *ASMR - Victorian London ambience/soundscape - YouTube*. [Online] Available at: <https://www.youtube.com/watch?v=AjJ6aMDkW8A> [Accessed 21 March 2022].
- Epidemic Sounds, 2021. *Sound effect: Vehicle Pedal Stomps | Epidemic Sound*. [Online] Available at: <https://www.epidemicsound.com/track/PsUZen5Zua/> [Accessed 20 March 2022].
- Epidemic Sounds, 2021. *Vehicle Pedal Stomp*. [Online] Available at: <https://www.epidemicsound.com/track/QX7Q9nrutj/> [Accessed 21 March 2022].
- gomolal, 2016. *Magnifying glass free 3D model | CGTrader*. [Online] Available at: <https://www.cgtrader.com/free-3d-models/science/laboratory/magnifying-glass-3af31232-8ee0-48d5-8bdd-f510eadf8bfa> [Accessed 29 March 2022].
- Inkarnate, 2021. *Inkarnate*. [Online] Available at: <https://inkarnate.com/maps/> [Accessed 3 March 2022].
- LemonLab, 2019. *First aid kit army | 3D Props | Unity Asset Store*. [Online] Available at: <https://assetstore.unity.com/packages/3d/props/first-aid-kit-army-148353> [Accessed 19th March 2022].
- Mixamo, 2013. *Fuse Character Creator*. San Francisco: Mixamo.
- Mixamo, 2022. *Crawling - Animation*. San Francisco: Mixamo.
- Mixamo, 2022. *Standing Idle - Animation*. San Francisco: Mixamo.
- Mixamo, 2022. *Walking - Animation*. San Francisco: Mixamo.
- NVJOB, 2020. *NVJOB Slender free VR / AR / low-poly 3D model rigged | CGTrader*. [Online] Available at: <https://www.cgtrader.com/free-3d-models/character/fantasy-character/nvjob-slender> [Accessed 27 February 2022].
- Runemark Studios, 2021. *Dark Fantasy Kit*. Budapest: Runemark Studios.
- The Boondock Saints, 2014. *Celtic Cross The Boondock Saints free 3D model 3D printable | CGTrader*. [Online] Available at: <https://www.cgtrader.com/free-3d-print-models/art/coins-badges/celtic-cross-the-boondock-saints> [Accessed 29 March 2022].
- Tropical Studios, 2021. *Dark Fantasy Gigantic Environment Unity Package*. Paris: Tropical Studios.

### Appendix 1 – Arcweave diagram of gameplay loop









## Appendix 2 – Voiceover Dialogue Script for Prototype Scenes

### Voiceover Script - The Sidgwick Investigations

#### *Upon loading into the Courtyard*

Lord Sidgwick:

Welcome team, to The Sidgwick Institute. The courtyard acts as our main base for planning our investigations into the occult and paranormal. When you are ready team, check the map over on the wall to begin any of our open investigations.

#### *Upon loading into the Grimme Street Town House*

Lord Sidgwick:

Right team, this is the Grimme Street Town House. Once home to a bank teller and his family. Recently, however, there have been reports of a malevolent force stalking the residence.

Our initial research team noted that the force has removed all doors from the house, for reasons we cannot fathom. They have also left a small number of useful items around the residence you may be able to use to help in your exorcism. Remember to use them wisely as they are limited in number.

You are to remove the sources of the power and exorcise the entity before the residence becomes a breeding ground for the paranormal and occult forces of this world.

Good luck,

Lord Sidgwick.