Design Document for:

Malicious Monsters

Table of Contents

Game Overview

A fast-paced action-adventure game where players wake up in a modern fantasy castle and must find a way to escape with their life. The player will be able to use almost anything as a weapon to kill the monsters they encounter. The castle is in the middle of a forest and will have a maze-like interior.

Core Game Loop

1. The game starts in the main menu, where players will be able to start a new game.
2. After starting a new game, the player will spawn in a room on the first floor.
3. The player will navigate through the castle using the WASD keys. The player will move around to get into different rooms, pick up weapons, and items like keys.
4. Players will be able to use weapons they pick up to kill enemies, preventing themselves from being killed. Players will be able to change between weapons they've picked up.
5. If players die, they will lose their progress. Players will respawn inside the initial room.
6. The player will need to find the main entrance/gates of the castle.
7. Players will be able to open the gate once they've found the 3 pieces of the master key. They must interact with the door in close range in order to open the gate and escape the castle.
8. Players win the game once they leave the castle. A victory screen will pop up, where they'll be able to go back to the main menu.

Game Mechanics

- **Health:** the player has 100 points of health**.** The player can lose health points if he gets hit by enemy attacks or by traps.
- **Death:** the player dies if his health reaches 0.
- **Walk**: the player will be able to walk/move left, right, forwards, and backwards around the map using the "**WASD**" keys on the keyboard or the "**left stick**" on the gamepad.
- **Run**: the player will be able to run as long as he holds the "**left shift key**" on the keyboard or the "**Left stick (LS/L3)**" on the gamepad. The player must be moving left, right, forwards, and backwards in order to run.
- **Jump**: the player can jump if he is grounded by pressing the "spacebar" on the keyboard or the "**south button**" on the gamepad.
- **Stamina**: the player has 100 points of stamina. Jumping and running will gradually decrease stamina points and the amount of lost stamina will be replenished gradually after some time. If the player runs out of stamina, he won't be able to run or jump until he recovers a bit of stamina.
- **Crouch**: the player can crouch if he is grounded and not running by pressing the "**CTRL**" key on the keyboard or the "**east**" button on the gamepad.
- **Shoot (weapons)**: the player can shoot weapons (guns, clubs, etc.) by pressing the "**left mouse button**" or the "**right trigger**" on the gamepad.
- **Reload:** the player can reload some weapons if the number of bullets that are already loaded is less than the maximum capacity of the weapon. The player can reload by pressing the "**R**" key on the keyboard or the "**west**" button on the gamepad.
- **Aim:** the player can aim in any direction as he moves the camera by moving the "**mouse**" or with the "**right stick**" on the gamepad. The camera will zoom-in a bit while aiming to provide a better view.
- **Throw**: the player can throw objects by pressing the "**left mouse button**" or the "**right trigger**" on the gamepad.

- **Change weapon**: the player can change his equipped weapon by cycling around his weapons by scrolling the mouse wheel "**up**" or "**down**" or by pressing the "**left" and** "**right**" bumpers on the gamepad. Also, players will be able to change their weapons by opening the weapon wheel by holding down the "**T**" key on the keyboard or the ""**Up**" button of the D-pad on a gamepad. While the weapon wheel is open, players will be able to select their weapon by pointing at the weapon they like with the "**mouse**" cursor or by moving the "**right stick**" on the gamepad. The weapon wheel will be closed if the player stops holding the specified button for the weapon wheel.

- **Interact/pickup**: the player can interact with different objects (doors, orbs, keys, books, ammo, etc.) when he's close to them by holding the "G" key on the keyboard or the "north" button on the gamepad**.** If the player stops holding the specified button to pick up a throwable, the throwable will be dropped.

- **Special abilities (orbs)**: the player can unlock permanent or temporary abilities by picking up orbs.

- **Poison Effects**: the player can randomly get temporary negative effects by taking damage from enemies.

- **Healing**: the player can recover a percentage of health by picking up health packs **(40% health regen of max health per pack)**

- **Enemies**: there are 5 types of enemies in the game that attack the player. ALL enemies can attack and follow/pursue the player, while some others can perform special actions like hiding.

- **Traps**: there are different types of traps in the game that can hurt the player by getting in contact with him. Traps function in an "automatic" way, where they have **ONE** specific behavior. (For example, spikes moving up and down from the floor)

- **Time and highscore**: the game features a timer, players can attempt to beat their high score each time they play.**Keys:** keys are useful for opening doors to other rooms that might have special orbs.

- **Master Keys:** there will be 3 keys hidden around the castle that the player must find and collect. Once players collect the 3 keys, they will be able to open the main door to escape the castle.

- **Cabinets**: all weapons (except for throwables and free clubs) will be locked behind cabinets around the castle. To unlock a cabinet, players will need to spend the necessary coins/blood required by the cabinet. Each cabinet will have a different price, depending on the TYPE of weapon that the cabinet contains; after unlocking a cabinet and obtaining the weapon in it, the cabinet will not spawn a new weapon. Each cabinet randomly spawns a weapon from a pool of weapons of the same type (For example, a cabinet will always spawn a Club type of weapon, and the pool size of that type of weapon is 7).Usually, cabinets require a lot of coins to be unlocked, so players will need to increase and maintain their kill streak in order to be able to unlock them.

- **Blood/Coins**: players are obtained by killing enemies and can be used to buy weapons from cabinets. Before spawning, each type of enemy will have a minimum and a maximum number of blood/coins, when an enemy spawns, the game will select and assign a random number/value between the minimum and the maximum values. When players kill an enemy, they will receive the amount of coins/blood that was decided when spawning the enemy. Players can obtain more coins by increasing their kill streak.

- **Kill Streak**: kill streak is how players can increase their coins rapidly and significantly. The kill streak begins once players kill 1 enemy, this will start a countdown timer that will **reset the kill streak** once it reaches 0. Players can "reset" the countdown timer by killing another enemy. While on kill streak, each enemy killed by the player will increase the kill streak value by 1 and the current coins/blood value of the player will be multiplied by the kill streak value, increasing their coins/blood significantly. However, if players lose their kill streak, their coins/blood will get reset to the number

of coins they got from killing enemies, eliminating the addition obtained from the kill streak they had. (For example, if the player had an active kill streak, and had 15 coins obtained from killing 3 enemies, the kill streak will update the coins to 45, but if the player loses the kill streak, coins will get reset to 15).

Game Dynamics

- **Reach higher areas (jump and run):** the player can run and jump or move and jump to reach higher areas.
- **Dodge (move and jump):** the player can dodge enemy attacks or traps by moving, jumping, or a combination of both mechanics.
- **Attack/Kill enemies:** the player can harm enemies and kill them by shooting or throwing things at them. The player can aim for better accuracy.
- **Shoot the environment:** the player can shoot different elements on the environment that could be useful in combat or in puzzles (shooting a lamp that falls on top of an enemy, causing damage).
- **Opening doors/unlocking new paths:** the player can open doors to unlock paths in the castle. The player must pick up a key first in order to open a door.
- **Hide:** the player can crouch to hide from enemies.
- **Collecting books/notes**: the player can find and pick up books across the castle. Said books contain information/lore about the world.
- **Reboot**: the level reloads again if the player dies, resetting all progress.

Game Aesthetics

- Shooting weapons should feel fast, agile, and powerful at the same time. This can be achieved by using a combination of particles, strong and

exaggerated animations while shooting, high sound effects, high fire rate in most weapons, and a fluid movement around the map.

- Particle effects should be triggered when an enemy takes damage and when they die. Particles should be dense and fast in order to get the player excited.
- The layout of the castle and the enemies in it should evoke stress and improvisation, causing the player to be alert and active at all times.
- Visuals on the game should be clear and easy to identify. Since the combat and movement is fast, the player should not get confused while moving around or while looking at things. For example, a player **MUST** know that he can interact with something because **ALL** interactable objects have a glowing pattern around them.
- Since the map is not very large, it is important that the castle FEELS huge to the player. We can achieve that by making sure that most rooms are big and filled with objects around the walls. It is important that the rooms are filled with objects around the walls in order to avoid that the rooms are boring to look at. And also, castles are filled with objects and/or details.

The Game World

Castle Overview

The game is set in Castle Majick, which is located in a forest in an unknown country. There is nothing around except trees for as far as the eye can see. The castle is seemingly a maze of rooms and hallways that connect one thing to another. The castle will have three main floors: the basement, main floor, second floor. Also, there will also be some exploration outside the castle, though not much. The player is only considered having escaped the castle once they leave the front gates of the castle property.

Castle Layout/ Interior

The castle will act similar to a maze. The player shouldn't be easily able to find their way out; escaping should be an adventure. The castle will have several floors, and the rooms on each floor will be connected together with hallways. Each floor will include 1 trap/puzzle room. Rooms can include orbs, books, keys, etc. Some rooms will be locked, the player must find keys to open those doors, 2 rooms per floor should be locked by keys. Even though the layout will be maze-like, there will be a reason why rooms are on the floor they are. As an example, bedrooms will stay on the upper floors.

As explained above, there'll be 3 main floors in the castle:

- **The basement:**
  - The aesthetic of this room should be based on the following: This is where some of the more dangerous methods of magical experimentation where being performed, as well as the dungeons and torture chambers.
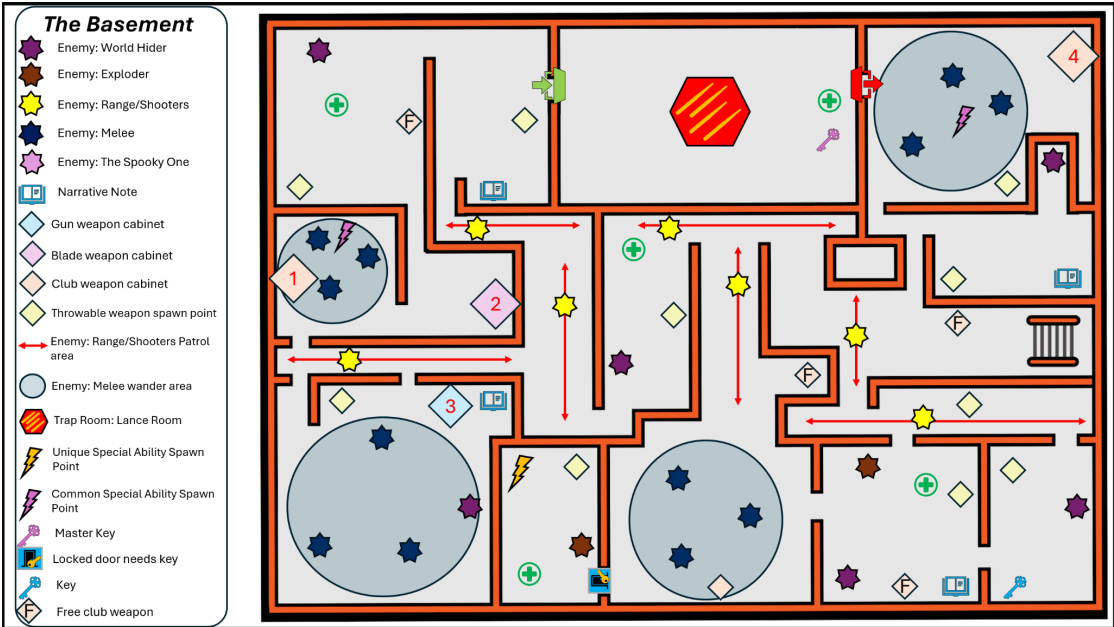
● **The main floor:**

o The aesthetic of this room should be based on the following: where the library, kitchen, and main entry hall will be located (the main floor will have other rooms, those are the just the main interests).
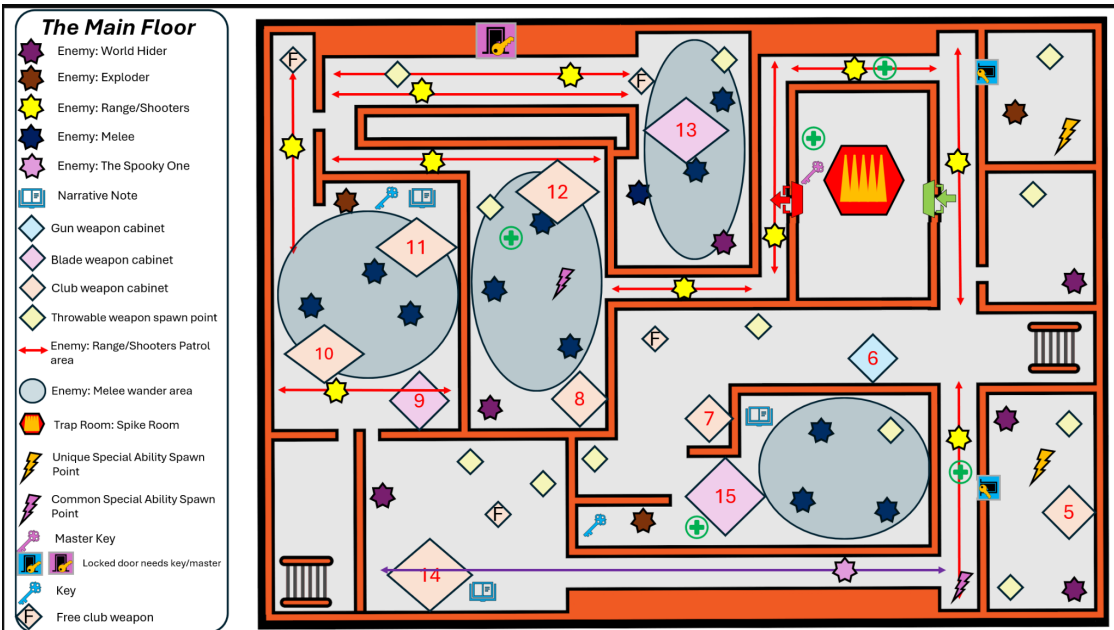
- **The second floor:**
  o The aesthetic of this room should be based on the following: will be where the bedrooms are situated, as well as some of the laboratories that weren't prone to dangerous magic.
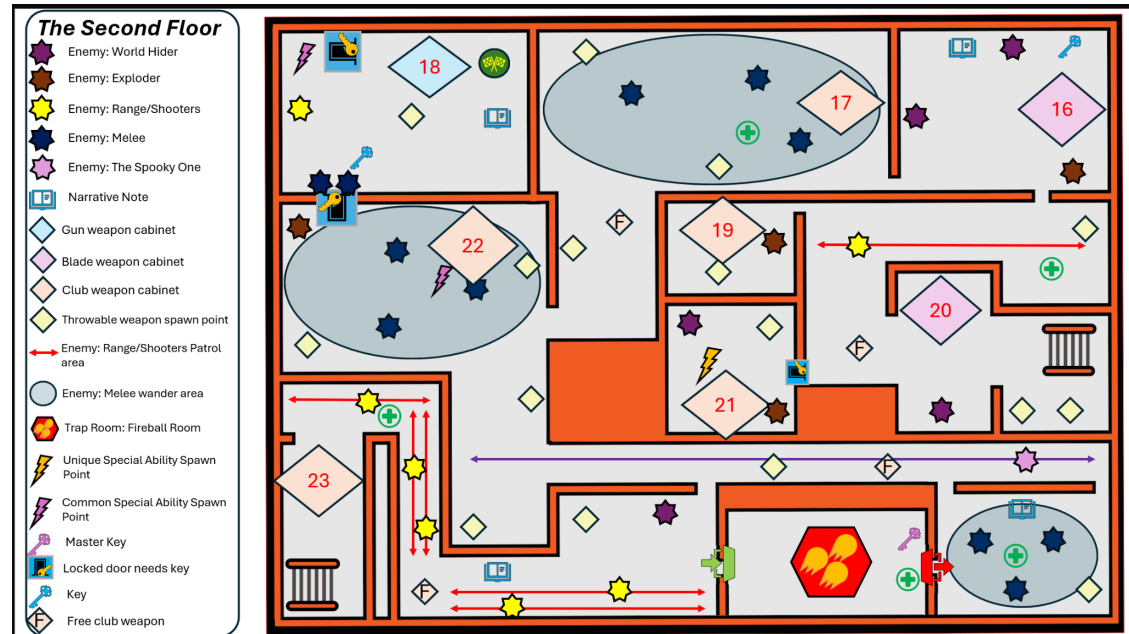
Outside Grounds/ Exterior Overview

The inside of the castle isn't the only place the player will be able to explore. There will be some sections of outside on the castle grounds that the player will be able to navigate in their gaming experience. There will only be very few spaces outside the castle for exploration though, as the outside is meant more for world building, scale, and scene extension. Some examples of places outside the castle would be:

- Garden
- Front Gates
- Entry Walk to Front Door
- Courtyard.

Trap Rooms (Cut Content)

Trap rooms are a way to surprise the player. Trap rooms can also be described as "challenge" rooms because the player must get through them to keep progressing. There'll be gates at the entrances of trap rooms that blocks the player from moving to another room, the player must find the solution first. A pedestal will appear on the other side of the room, the player must interact with it in order to open the gates (for example, if the player gets in from the north of the room, the pedestal will appear on the south, and vice versa.) It is important that the traps get activated regardless of the direction where the player get into the room.

There will be 3 types of trap rooms:

- **Lance room:**
  o When the player steps into this room, some lances will be thrown afar from him in order to let him know that that's a trap room.
  o There'll be lance spots on the sides (left and right) of this room that will be activated if the player steps on specific spots/squares on the floor.
  o The player must find the correct order in order to escape the room.
  o There'll be clues of the correct path on the walls of that room.
  o There'll be some icons/figures on each spot/square that'll be useful for the player to discover the correct path.
  o Lances should have a cooldown of 1 second after shooting, allowing the player to reallocate.
  o The doors of the room will open once the player steps on all the correct spots.
  o Lances deal 10% of damage to the player.
  o Watch 7:52 for reference: https://www.youtube.com/watch?v=jTYaSqJuNhs

Lance Room

- Lance Switch
- Safe Path
- Lance Ejector
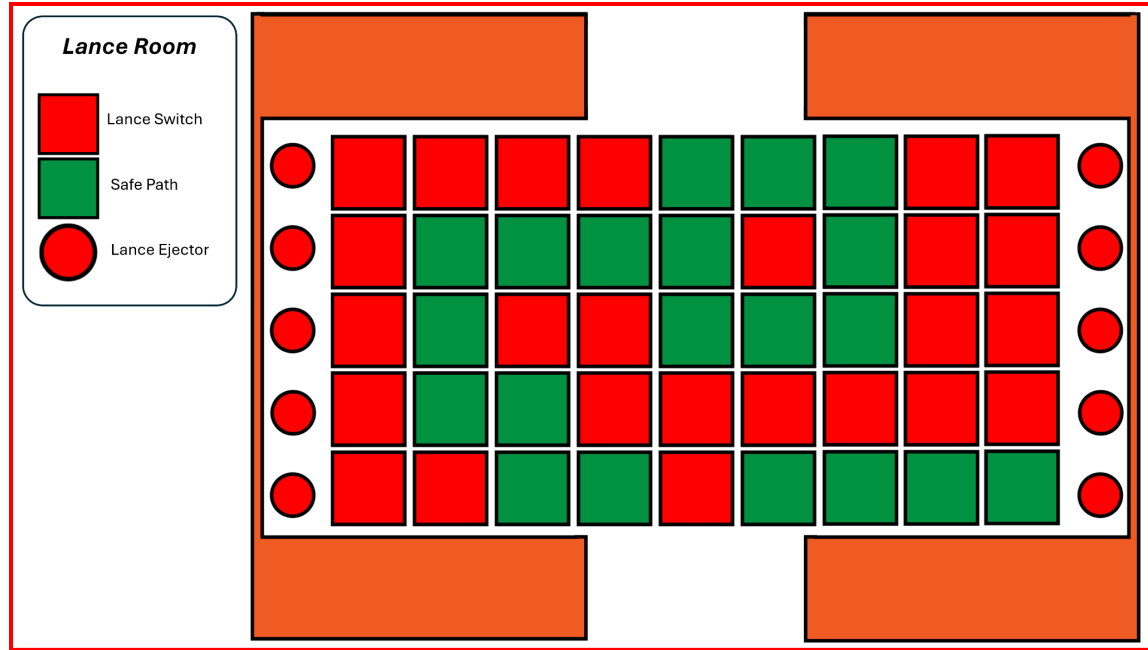
- **Spikes room:**

  o When the player steps into this room, some spikes will rise from the floor, far from the player's position to let him know that that's a trap room.

  o There'll be spikes coming in and out from the floor in different directions, patterns, lengths, and speeds.

  o The player must find a way to jump through the spikes by finding a good order to jump on them when they are not visible.

  o Spikes deal 10% of damage to the player.

Spikes Room

Spikes per second

Short Spikes **Continuous 1-1-1**	(orange)
Short Spikes **1-Hold 2-2-Hold1**	(purple)
Safe Path	(green)
Long Spikes **1-2-Hold 3**	(blue)
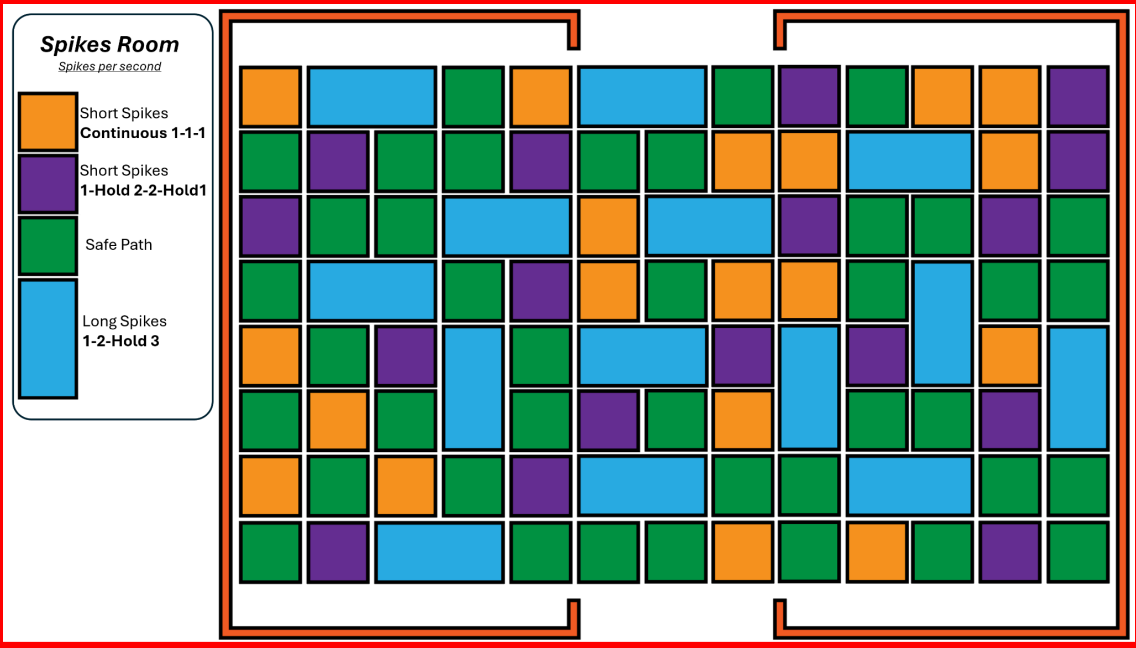
- **Fireball room:**

  o   This room is like the Lance room but with fireballs that deal more damage than the lances.

  o   Fireballs deal 15% of damage to the player.

Fireball Room

- Fireball Switch (red)
- Safe Path (green)
- Fireball Ejector (red circle)
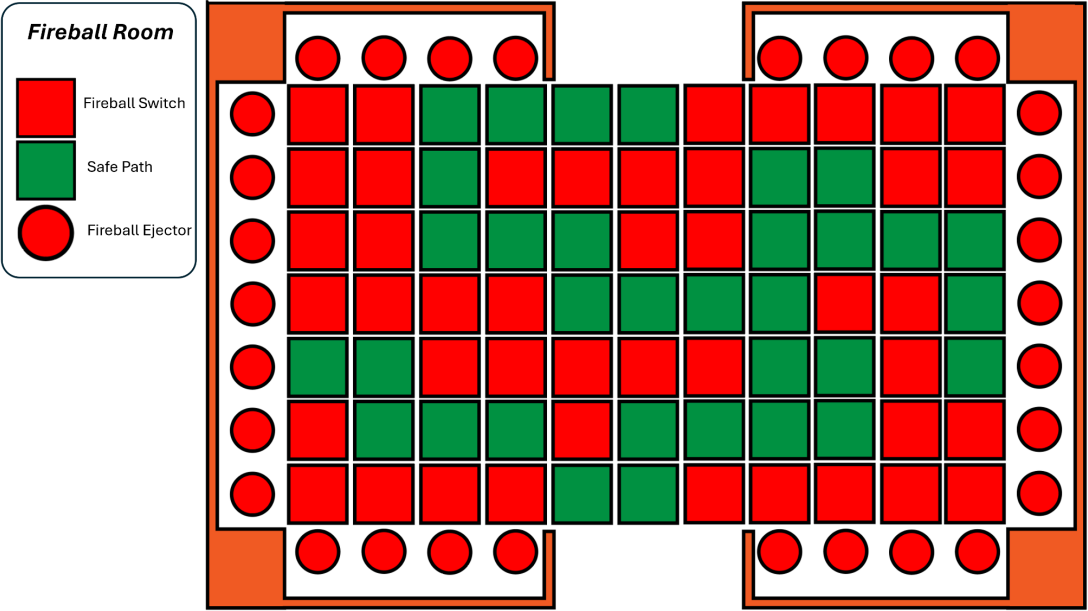
The Physical World

Overview

Everything inside the world will be built using modular assets. The walls, pillars, ceiling tiles, floors, etc. Will all be different objects put together to make a building and map, with rooms and hallways for exploration. These areas will then be heavily populated with decorations and weapons that will help tell the story of the game while also allowing the player to fully enjoy their gaming experience. The weather and time of day will also give itself to the aesthetic and mood of monster killing. The castle and its surrounding grounds will also be all that the player can see and explore. The grounds are set in the middle of an unknown forest, and the only things in the area are trees and hills. The player needs to feel isolated in this current world and wanting to escape.

Key Locations

There are some key locations that the player will come across during their gameplay:

- **Bedroom:**
  - This is where the player starts in during the game
  - Leaving this room will immediately tell the player that the castle is dangerous.
  - In the room there will be several different weapons that the player can use (different weapons for different player types).
- **Outside main gate:**
  - Where the player must leave through to win the game.
  - The main entry hall is another key point of interest in the map.
  - This room will lead to many different sections and rooms in the castle, so the player will constantly be going through this area.

Travel

The player navigates the physical world of the game with a first-person controller, giving them the controls for walking, jumping, running, and crouching throughout the game. The physical world of the game isn't very large though, just dense and maze-like. The only places the player will be able to travel is throughout the many rooms and hallways of the castle, and its surrounding grounds.

Scale

The physical map isn't very large, but the castle will feel huge. This will be done by having the player constantly get lost inside its maze-like hallways and rooms. The player should feel the scale of the castle by not always knowing where they are in its many rooms. The scale of the world and castle will also be understood by well-placed nature such as trees by windows, or off in the distance.

Objects

The map will include many decorations that will help show off the lore and story of the game, without being an interference in the gameplay. This will be things from magic artifacts and items, or books everywhere, or tools for experimentation, or blood splatters, among other things. The setting is also a modern fantasy, so there won't only be swords and axes in the castle, but also modern items as well such as the guns the player will be able to find and use as weapons.

The castle and surrounding grounds will be home to many weapons, but each can fall into a simple category: Guns, blades, clubs, throwable items (bricks, wood planks, rocks, etc.), and shields. Some of these weapons, though can be used as one, aren't weapons. Instead, they are an object/ decoration in the map. This could be things from bricks, books, wood planks, body parts, and many more.

Weather

The weather in the game won't be changing over the course of time and day but will instead remain at a constant rainy night/ late evening. This is to give the game a dark and gloomy aesthetic which will add to the monster killing experience. The weather will create a mood prompting the player to kill.

Time

The time of day won't change no matter how long the player decides to explore and kill the monsters. The time will always remain night/ late evening. This specific time of day is to give the atmosphere and aesthetic that will complement the enjoyment of monster killing in a castle.

Traps

Some weapons in the game come in the form of traps. The player will be able to place them and wait for an enemy to activate the trap. Not all traps will be for the player to use though. Some traps will be from the castle itself: the old residents were performers of magic, and as such, there will be left over magic traps that the player must be aware of. This could be anything from disappearing floors with pits of spikes, to a fireball coming out of a painted woman's mouth. There will be signs of a trap being there, but the player must pay attention to recognize these signs.

Camera

Overview

The camera will be a part of the first-person controller, and will not move from that position during the game. The camera will throughout the entire game act as the player's eyes, except in scenes that don't have a player to control: main menu, win, death, etc.

Game Engine

Overview

The game engine that the game will be made in will be Unity version: **2022.3.48f1**.

Water

The world will have small amounts of water, but they will never be a focus of any sort. It'll be a waterfall off in the distance barely visible, or a water fountain in the castle gardens. Since the water won't be a focus, it doesn't need to be complicated in any way. The water will also move and look with the intended art style in consideration.

Collision Detection

Throwable objects will have a hard time dealing with collisions in the game. Even though the level is low poly, there will be quite a few corners, edges, and faces that might not cooperate nicely with fast moving projectiles. So, throwable weapons will need better collision detection than most other things in the game. Enemies will also need some interesting collision detection because of weapon Raycasts. A player's bullet should hit an enemy: a bullet shouldn't hit a collision box that's way too small or way too big.

Game Characters

Overview

Throughout the game the player will only play as a single character, Nathaniel (Nate) Kane. There will however be lots of references of other people in notes and documents. Those articles will reveal the lore and story of the game to the player.

Nate Kane - The protagonist:

32 years of age, office worker.

Grew up in New York. He lived a happy life reading books that his mother bought for him and learning new things in school. He is single and lives with his mother in a decent apartment in NYC. He has no interest in being in a romantic relationship, he works as an accountant in one of the most important tech companies in NYC. The only person he cares about is his mother, his biggest inspiration and motivation.

Despite earning a good amount of money, he is not happy with his job. The thing that keeps him moving is the goal that he has, "buying his mom her dream house, one that reflects all the love, hard work, and inspiration that she provided to him after his father's death". He got kidnapped by the "torn" magician clan near the NYC subway when he was on his way home after his long shift, and he is determined to get out of there in order to get back to his mother in NYC.

Kim Kane - Nate's mother (Adopted)

61 years of age, Adopted.

She never knew who her biological parents were. Her father was the owner of the castle, and the leader of the magicians. Kim took good care of Nate after the death of her husband. She worked very hard in 2 jobs to get enough money to give Nate a good life during his childhood, her goal has always been to provide what his father no longer could because of his early death. She's still living in NYC, looking for Nate after his disappearance.

Rick Kane - Nate's father (Death)

Death at 38 years of age.

Said to be fatally hit by a truck, but in reality, he was kidnapped by the "torn" magician clan as well when Nate was a kid to make further experiments with him after Kim's adoptive father killed her mother.

The NYCPD and the International police looked for him for 7 years, without being successful in finding him, they told Kim and Nate that he got hit by a truck. Rick was a responsible father and husband, he always took good care of Nate, and he was always there for both Nate and Kim.

Samuel Winslow - Kim's Adoptive father, Nate's Grandpa

82 years of age.

He is the leader of the "torn" magician clan and Kim's adoptive father. He and his wife Lindsay adopted Kim when she was 2 years old. He closed a deal with a mysterious shaman in order to be the owner of Castle Majick.

He is an evil man who has been dealing with the commercialization and experimentation of dark magic, he has always kept this as a secret to every member of his family. He tells everybody that he is "the owner of a magic pharmaceutical provider", which is a legitimate business that he runs, but the truth is that he only runs that business in order to hide his dark side and to do money laundry.

He lied to his wife about the real reason why he wanted to adopt Kim. He said that he had always wanted to raise an orphan, but in reality, he only wanted to do experimentation in the future with her in his labs. However, a small part of him is sentimental, and he never did any experiments with her because he ended up loving her as a daughter. However, that didn't get rid of the fact that he really wanted to do some experiments with someone, and as a very patient man, he decided to wait for her to be married and eventually, have a child.

He has this idea that experimenting with someone you know is more ideal and fun because of the emotions it conveys, that's why he doesn't like to kidnap a random person in the streets to do experiments; he is a crazy man.

In the meantime, he decided to use his wife, Lindsay, as a subject for his experiments; where he ended up killing her in cold blood after finding out that she was getting information around the castle to get him arrested. After this, he decided to do experiments with Kim's husband, who eventually got killed as well due to a failure in an experiment.

He has been working for years to develop the Phantax Distrixth Spell, a massive destruction spell 100 times more powerful than an atomic bomb thanks to its seamless propagation and quick deterioration properties. However, the experiments regarding this spell have been a failure so far.

Lindsay Winslow - Kim's Adoptive Mother, Nate's Grandma

Death at 81 years of age

She never wanted to have a child, but she was convinced by her husband. However, she always took good care of Kim from the very first day she adopted her. After getting knocked out by Samuel to move her to the castle without risking her knowing the exact location of it, she got killed by him after she got caught getting information of Castle Majick and the "torn" magician clan in order to get him behind bars.

The "Torn" magician clan

This clan was founded by Samuel Winslow when he was 22 years old, the objective of it was to develop and sell the latest advancements in dark magic to malicious cartels and gangs of monsters all around the world. The clan consists of different kinds of smart monstrous magicians that try different experiments

Castle Majick

Castle where the "torn" magician clan operates. The castle is utilized as an experimentation lab for the development of dark magic, they also operate as a magic pharmaceutical provider in order to get funds, cover their dark operations, and money laundry. The castle is located in the Boral Forest region in Canada. However, the location of this castle is unknown to the world thanks to an outstanding invisibility spell cast by the "Torn" magician clan.

Enemies and Monsters

There will be quite a few different monsters wandering the halls and rooms of Castle Majick. Even though there will be lots of monsters, they can be condensed to a short list of monster types:

<u>World Hider:</u>

- This enemy is hidden in objects around the castle (i.e. paintings or armor)
- The enemy starting point is that he is hidden in a random object of a room, then it jumps out when the player walks close by around 5 meters (radius). (it should be close range, 5 is an example, we can change this specific value later)
- Once the enemy jumps out of the object, it will start following and attacking the player.
- This enemy is slow but aggressive while in combat, meaning that his attacks are fast, but his walking speed is slow, and that he tries to get quite close to the player because of his fast movement.
- Each successful attack deals high damage to the player.
- If the player gets out of the enemy sight, then the enemy will begin to look for him for 5 seconds. If the enemy fails to find the player, then it'll hide in another object to hide in, no matter which room.
- The objects where this enemy can hide should be predefined in-engine, from a list of 5 options. So, for example, there should be a predefined list of objects like paintings or armor that are options for the enemy to hide.
- The starting room should be always the same and not randomized, the starting object should be randomized. For example, this enemy should always start in room 4 of floor 1, but it should be hiding in a random object from a list, like armor or a painting.
- This enemy has 150 points of HP, once it reaches 0, it dies.
- This enemy doesn't have the ability to regain health.

 10/9/2024

World Hider Movement Cycle flow chart:

```
                              ┌──────────┐
                              │  Start   │
                              └────┬─────┘
                                   │
                                   ▼
                        ┌────────────────────┐
                        │ Enemy hidden in a  │
                        │ random object in a │
                        │  specific room.    │
                        └─────────┬──────────┘
                                  │
                                  ▼
                        ┌────────────────────┐
                        │    Stay hidden     │◄────┐
                        └─────────┬──────────┘     │
                                  │                │
                                  ▼                │
                              ◇ Player walked      │
                                close by           │
              ┌──────────────  around 5 meters ─── No
              │                 (Radius) ◇
              │                   │
              │                  Yes
              │                   │
              │                   ▼
              │         ┌────────────────────┐
              │         │  Enemy jumps out   │
              │         │  from the object   │
              │         └─────────┬──────────┘
              │                   │
              │                   ▼
              │         ┌────────────────────┐
              │         │   Enemy follows/   │◄────┐
              │         │ attacks the player │     │
              │         └─────────┬──────────┘     │
              │                   │                │
              │                   ▼                │
         ┌──────────┐    ◇ Player out of sight? ◇─ No
         │Look around│◄── Yes
         │for 5      │
         │seconds    │
         └────┬──────┘
              │
              ▼
         ◇ Player found? ◇
              │
             No
              │
              ▼
         ┌──────────┐
         │Hide in   │
         │random    │
         │object in │
         │current   │
         │room      │
         └──────────┘
```
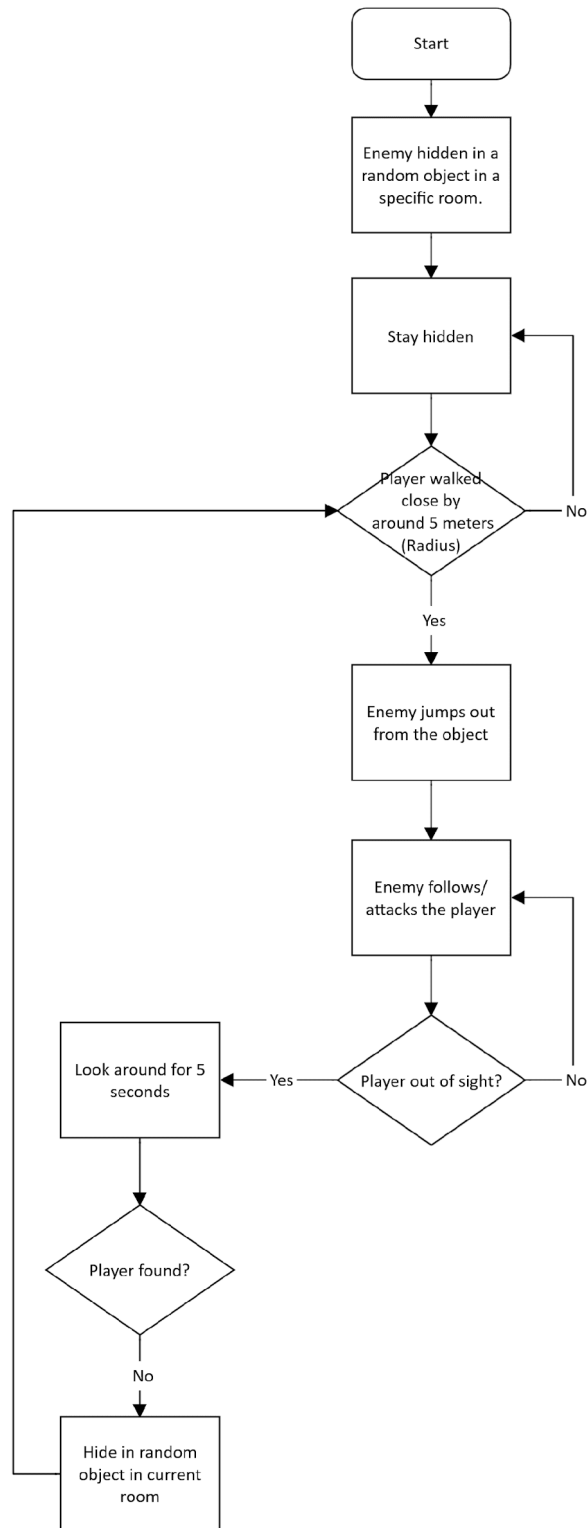
Exploder:

- This type of enemy is fast and loves to surprise the player because it is located near the entrances of some rooms (like a jumpscare).
- This type of enemy has a glowing pattern around his body, allowing better visibility to the player.
- Similar to the "World Hider", it starts following the player if he [the player] walks close by around 3 meters (radius).
- Right after this enemy begins to chase the player, a countdown will start and it will "massively" explode after 6 seconds, causing high damage to the player.
- If the player manages to reduce its HP to 0 before the countdown reaches 0, then the explosion will be minimal, causing no damage to the player. (the countdown will not be literally shown to the player, the visual queue will be that the glowing pattern around the enemy will blink faster as the time passes by "tin bip bip bip bip")
- This enemy has 80 points of HP, once it reaches 0, it dies.
- This enemy takes the normal amount of damage from weapons AFTER starting the countdown. However, the players' attacks will be twice as effective if the enemy hasn't started the countdown yet. So, for example, if the countdown has started, and the player shoots at it once with a weapon that has 30 points of damage, the enemy's hp will be decreased by 30. But if the countdown hasn't started yet, and the player shoots at him with the same weapon, then the enemy takes 60 points of damage. However, this will only work once because the enemy will also start the countdown after being hit in this condition.

Exploder flow chart:
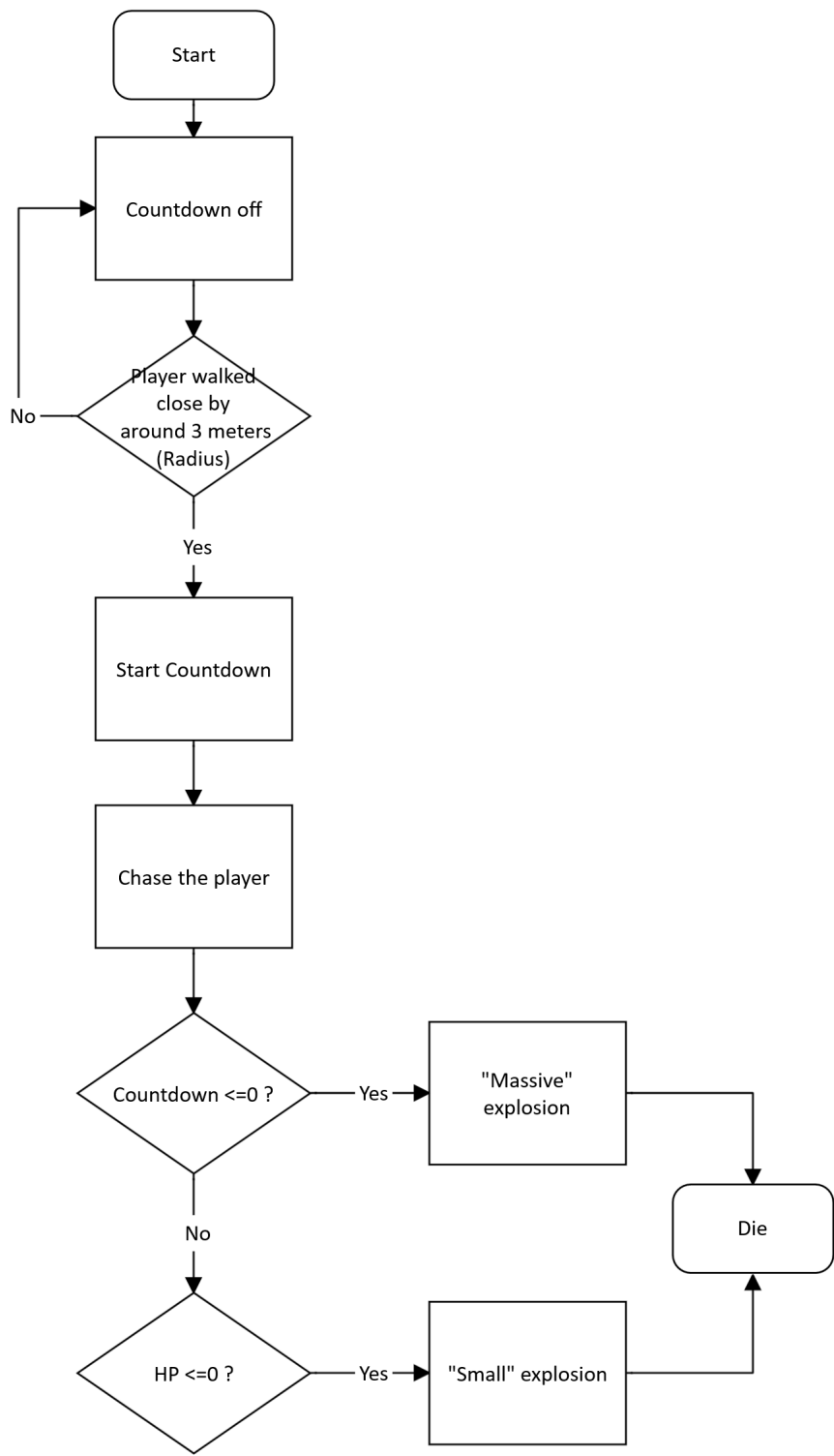
<u>Range/Shooters:</u>

- This type of enemy starts shooting the player with weapons like bows and rifles when they see the player in a linear medium-long range of 9 meters.
- They are usually patrolling in some room entrances or in some hallways.
- This type of enemy is slow, but their attacks are fast because of the weapons they use.
- Each successful attack deals moderate damage to the player.
- They will stay away from the player, meaning that they will walk away If the player gets close to them.
- They lose sight of the player quite quickly because of their quite linear line of sight, but they will look for the player for 12 seconds after losing sight of the player.
- If they don't find the player after 12 seconds, they will go back to their original patrolling position to keep patrolling.
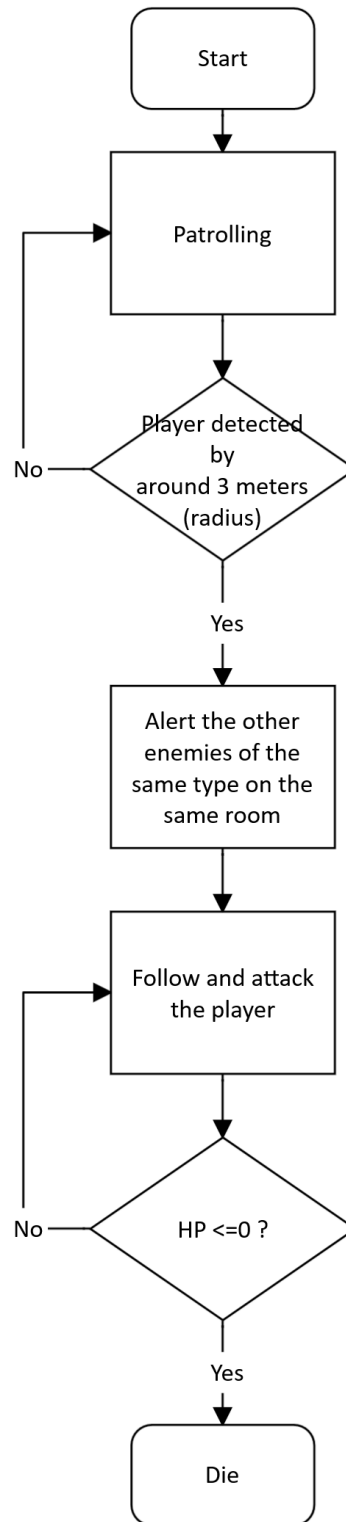- This enemy has 120 points of HP, once it reaches 0, it dies.

Range/Shooters movement flow chart:

 10/9/2024
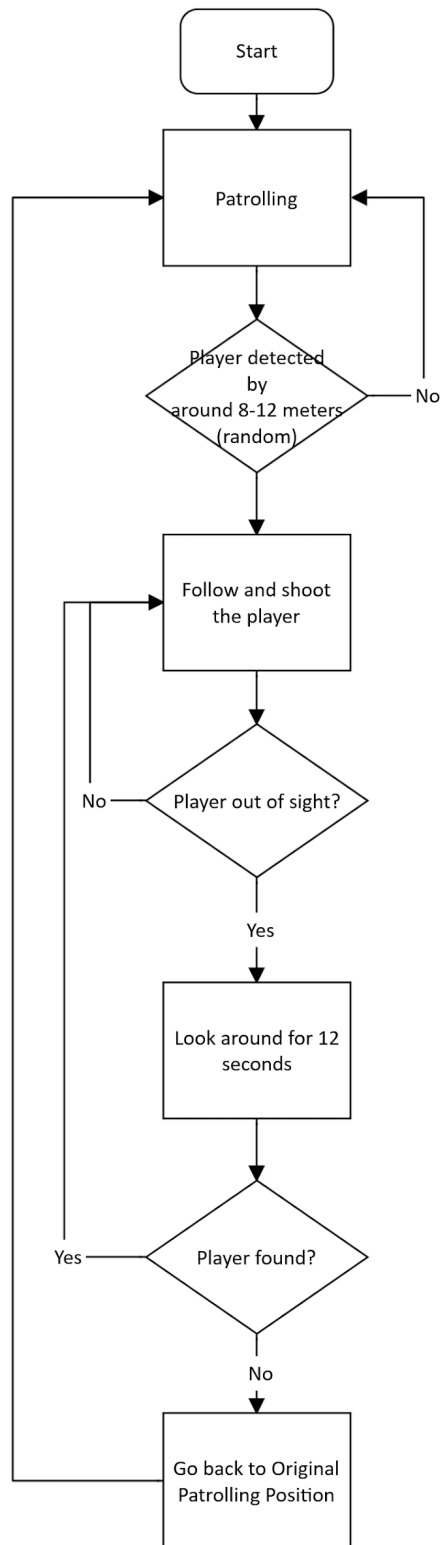
Melee:

- This type of enemy uses melee weapons.
- They start following and attacking the player if he [the player] walks close by around 3 meters (radius).
- Once this type of enemy starts chasing, it won't stop pursuing the player.
- There'll be 3 enemies of this type in the same room, the 3 of them will be patrolling around that room. It only takes one of the three enemies to spot the player for all of them to start attacking and following the player.
- This type of enemy is fast in both his attacks and movements and deals a moderate amount of damage to the player on each landed attack.
- Each successful attack deals low damage to the player.
- This enemy has 50 points of HP, once it reaches 0, it dies.
- When the health of this enemy is low, it will run away from players if they have a melee weapon equipped.

Melee flow chart:

```
                    ┌─────────────┐
                    │    Start    │
                    └──────┬──────┘
                           │
                           ▼
        ┌──────────────────────────────────┐
        │                                   │
   ┌───────────────────┐                    │
   │                   │                    │
   │    Patrolling     │                    │
   │                   │                    │
   └─────────┬─────────┘                    │
             │                              │
             ▼                              │
         Player detected                    │
              by                            │
   No─── around 3 meters ──────────────────┘
            (radius)
              │
             Yes
              │
              ▼
   ┌───────────────────┐
   │  Alert the other  │
   │  enemies of the   │
   │ same type on the  │
   │    same room      │
   └─────────┬─────────┘
             │
             ▼
   ┌───────────────────┐◄──────────┐
   │ Follow and attack │           │
   │    the player     │           │
   └─────────┬─────────┘           │
             │                     │
             ▼                     │
   No ──── HP <=0 ? ───────────────┘
             │
            Yes
             │
             ▼
   ┌───────────────────┐
   │       Die         │
   └───────────────────┘
```

The spooky one (player sight based):

- The movement of this type of enemy is based on whether the player is looking at them or not (like the boos from Mario).
- They are usually located at one end of the hallways.
- This enemy will start following the player when they see the player in a linear medium range of 7 meters. Once it starts following the player, it will only follow the player in a linear way (For example, hallway, room, room)
- When the player moves to another lane, the enemy will go back to the hallway if he is left behind in a room (without being locked). However, the player can trap this enemy in a room by locking some gates (if available). Meaning that the player can make the enemy move to a room where it's allowed to move and close the room gates to trap contain it there.
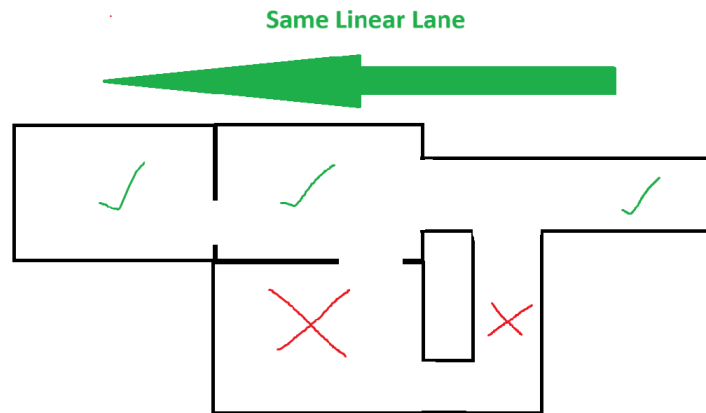
- This type of enemy will move when the player is in their line of sight and NOT looking at the enemy; meaning that the enemy will stop following the player once the player looks directly at the enemy.
- Player attacks are only successful when the enemy is following the player.
- Each successful attack deals high damage to the player, but their attacks are slow and close ranged.
- This enemy has 100 points of HP, once it reaches 0, it dies.

10/9/2024

The spooky one Movement flow chart:
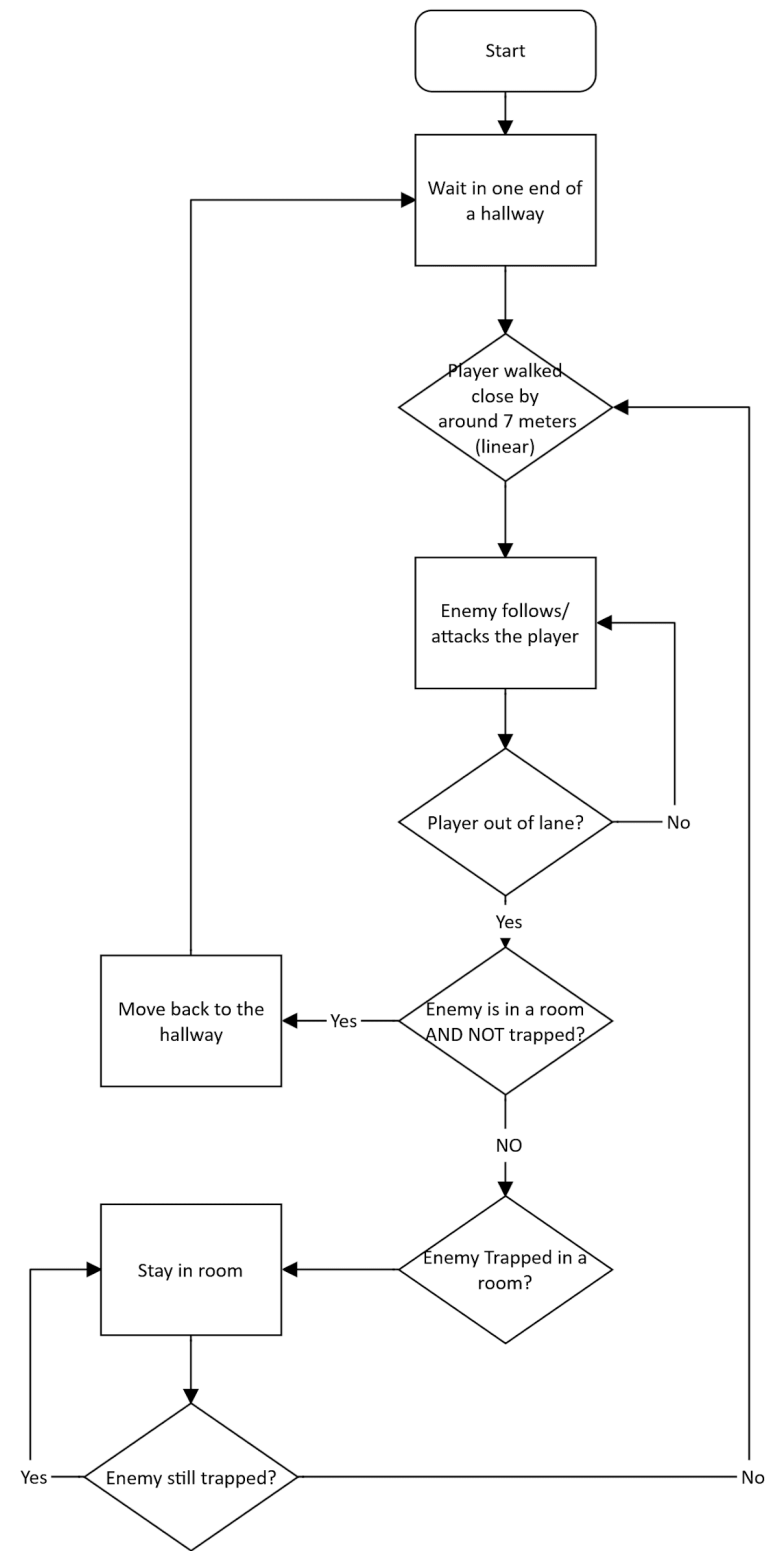
Weapons

Overview

- There will be many weapons around the map: inside and outside the castle. Almost anything they player can see will be a weapon. Each weapon can fall into one of several weapon categories: guns, blades, clubs, throwables (bricks, wood planks, rocks, etc.), and shields. Since most things in the world can be used as a weapon, not everything will technically be an actual weapon.

- There will be decorations in the map that the player can use as a weapon: things like books, body parts, and many more.

- The game will use a weapon item wheel for the player to carry around weapons. This wheel will have several slots, and the player will be able to freely switch between the weapons at any moment.

- Since a lot of weapons will be available to the player in the game, not all of them technically weapons (books, bricks, etc.), there will always be some way to tell them apart from just regular decorations.

- The spawn location of each type of weapon will always be the same on every run. However, the weapon spawned will be random. This adds a more unique experience on every run that the player plays. (For example, a gun type will always be spawned in room 5 of the main floor, but in 1 run it could be an assault rifle, while in the second run it could be a bow.)

- Throwables of the same type are not stackable on the weapon wheel(for example, you cannot have 2 body parts but you can have 1 body part and 1 brick)

Weapons have a "Uniqueness" levels; unique sporadic, and abundant:
- **Unique**: There's only one weapon in the castle.
- **Sporadic**: There are 2 to 3 of these weapons in the castle.
- **Abundant**: There are 5-7 of these weapons in the castle.

Special abilities and Poison effects

Overview

- There'll be special abilities (items represented as orbs) that grant special abilities to the player permanently or temporarily. Each type of Orb is unique and located in some rooms in the castle, the player only needs to touch these orbs to get their benefits.
- Aside from the special abilities, the player can also get temporal negative effects if enemies successfully hit the player. This is randomized on each attack, meaning that each time an enemy attack is successful, it will be random if you get a temporal negative effect or not, the type of negative effect that the player gets by being hit by an enemy is also randomized.
- Active special abilities and poison effects are shown in the HUD.
- The abilities will spawn in the same way as the weapons (A random ability will appear at the same spawn point as abilities of the same type).

Narrative books/notes

Overview

- The player will find books/notes all around the castle that include lore about the game. The player will be able to read those books by approaching them and pressing the same key used for pickup.
- There will be 11 notes in the castle:
    - 4 on the basement
    - 3 on the main floor
    - 4 on the second floor
- The lore explained in the books found on each floor will be about the specific floor where those were found with the purpose of making sense and explaining more of the floor where the player collected the book/note.
- When the player picks up the notes, a UI screen will pop-up, showing the text.