

# **Games Design Document**

## **Dungeon Explorer**

**Akshat Jerath**

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## High Concept:

- One line Introduction

Delve into darkness as a bold dungeon explorer, conquering challenges, unlocking treasures, and unravelling mysteries on an uncharted island.

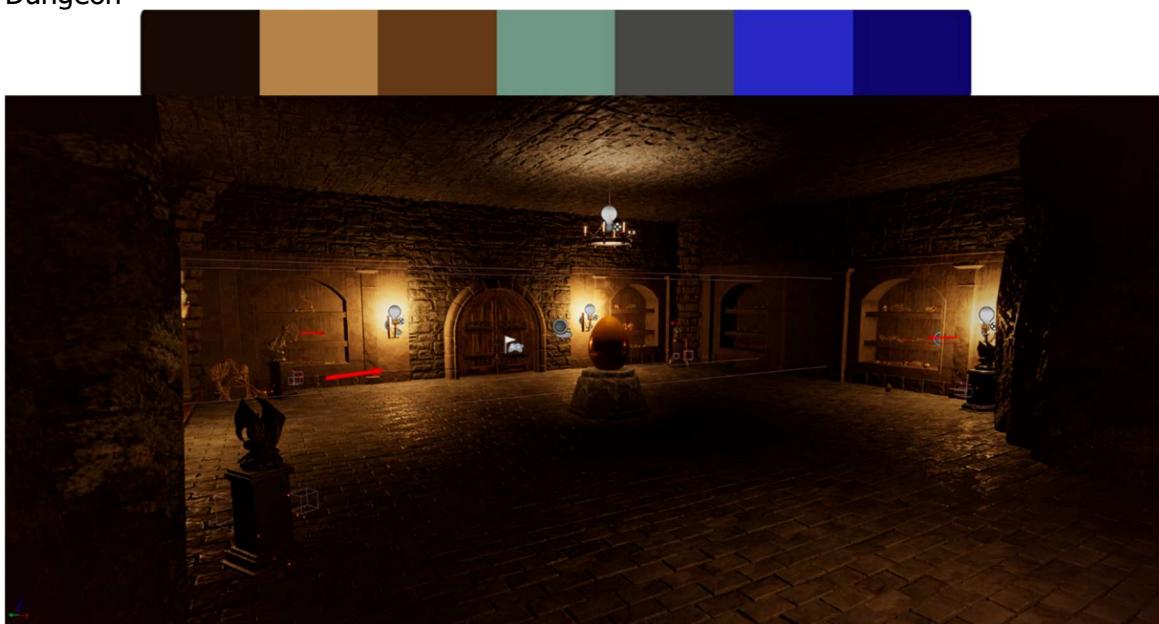
- Theme / Environment / Setting

Theme-Medieval jungle and old ruined temple.

Environment- The runic dungeon is of the old.

Setting- The background setting is set in 3 states. One is the beach where the game has a tutorial. Second is the cave where the player must enter the dungeon. Third is the dungeon where the cure is present.

Dungeon -



Beach –



Cave -



- Unique Selling Point/s and Key Mechanics

A unique selling point is that the player must play the game tactically. The player must make smart choices in managing his resources and avoiding the enemy.

Key Mechanics are pick-up systems, hiding mechanics, flashlight, swings, hammer, projectile launcher, and puzzle mechanics.

- Enemy Types

There is only one enemy in the game.

- Pickups

1. Health pick-up.
2. Battery pick-up.
3. Toy pick-up.

- Types of system: -

1. Examination system – Player can examine some items in the game.
2. Inventory system – Player has a inventory system.
3. Health system – Player has a health system.

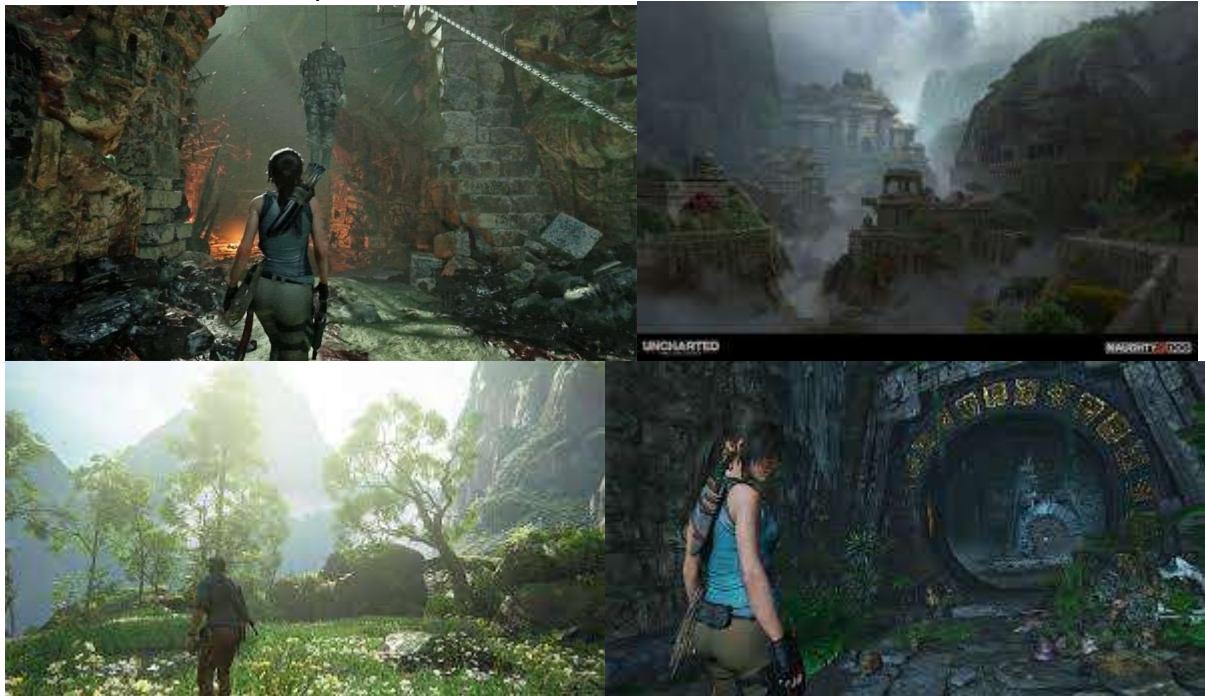
- Player Characteristics Outline

Main player is a man called Arthur who lives in a village. He has a mother who has been diagnosed with a very deadly plague and to cure her he has embarked on a journey to the island where this dungeon is situated and has the cure in the crypt.

- Target Audience

The target audience is between 15-22 years old people as people in this age group not only like to rush the game but also like to explore the game and try and have fun with every aspect of the game.

- Market and Competitors



The market competitions are uncharted 4 and the tomb raider series.

There are the games on the market, these are the famous ones. Both games have a different game style, play style, art style etc.

The gameplay of Tomb Raider is primarily based around action-adventure framework, with Lara navigating environments and solving mechanical and environmental puzzles, in addition to fighting enemies and avoiding traps.

Uncharted 4: A Thief's End is an action-adventure played from a third person perspective, with platforming elements. Players traverse several environments, moving through locations including towns, buildings, and wilderness to advance through the game's story. Players use firearms, melee combat, and stealth to combat hostile enemies.

### **Level Design documentation:**

- Goals of level & key areas

The game is focused on the player reaching the dungeon crypt by solving the puzzles and avoiding the enemies by hiding in the wooden coffin. The main goal of the player is to reach the dungeon crypt and get that cure for his mother and everyone else.

As for the key areas of the map, there are a few, the main one being that of the dungeon crypt, this will be the location where the player meets the antagonist.

The next key area is the dungeon start section as the player must solve his way through to reach the end.

- Story (How, why, What)

Once there was a peaceful village. The people there lived simple lives until a malignant plague swept through their homes, casting them into a state of despair. Cries filled the air as everyone succumbed to uncontrollable fits of coughing, blood staining their lips. The merciless disease spared only a few souls, among them a young man named Arthur, whose heart ached as he watched his mother, too, succumb to its clutches.

In her final moments, weakened and pale, his mother beseeched Arthur to prepare for her burial. Her voice, feeble yet determined, echoed in his ears. But Arthur could not bear the thought of letting her go. He knew her time was near, yet he clung to the fragile hope that a miracle would save her.

Days passed, heavy with grief, until Arthur's eyes fell upon an old man with milky white eyes, his voice carrying through the wind as he called out to him. The old man claimed to possess knowledge of a cure for the plague, concealed within a hidden dungeon on the enigmatic Island of Drahcroderin. A surge of determination coursed through Arthur's veins. He knew he had to embark on this perilous journey, though he remained unaware of the trials that awaited him.

With every step he took towards Drahcroderin, the sense of foreboding grew. The island loomed before him, shrouded in mystery and danger.

At last, he found himself standing before the entrance to the dungeon, an ominous gateway into the unknown. Heart pounding, he descended into the depths, flashlight in hand, navigating treacherous corridors and eluding deadly traps. The air grew thick with anticipation, the weight of his village's survival resting on his shoulders.

In the heart of the labyrinth, after being captured Arthur became the child of Drahcroderin. Being the child of Drahcroderin he received the cure. Arthur found a glimmer of hope in a desolate place. It was a piquant elixir, imbued with healing properties. With the cure in his hands, he returned to his village.

Arthur rushed to his mother's side. Gently, he raised her head and administered a sip of the miraculous remedy. As if touched by divine intervention, the blood-soaked coughs ceased, and serenity washed over her features. The cure had saved her.

Driven by the urgency of his mission, Arthur shared the elixir with the remaining survivors, but to his dismay, it only brought relief to half of the village. However, a strange transformation occurred within those who were cured. They developed a peculiar craving for the delicacy of the cure, their taste buds forever enchanted. They became addicted, their lives tethered to the precious elixir.

Meanwhile, the uncured half of the village clamored for more, their desperation unrelenting. Arthur, with his once vibrant eyes now milky white, offered them a haunting smile. He

guided them towards the Island of Drahcroderin, where their salvation lay. The island called to them; it was impossible to resist.

And so, the tale of Arthur, the child of Drahcroderin, unfolded—a fable of sacrifice, addiction, and the weight of choices made. The Island of Drahcroderin held the answers, the resolution for those who dared to seek it.

- Game progression from narrative point

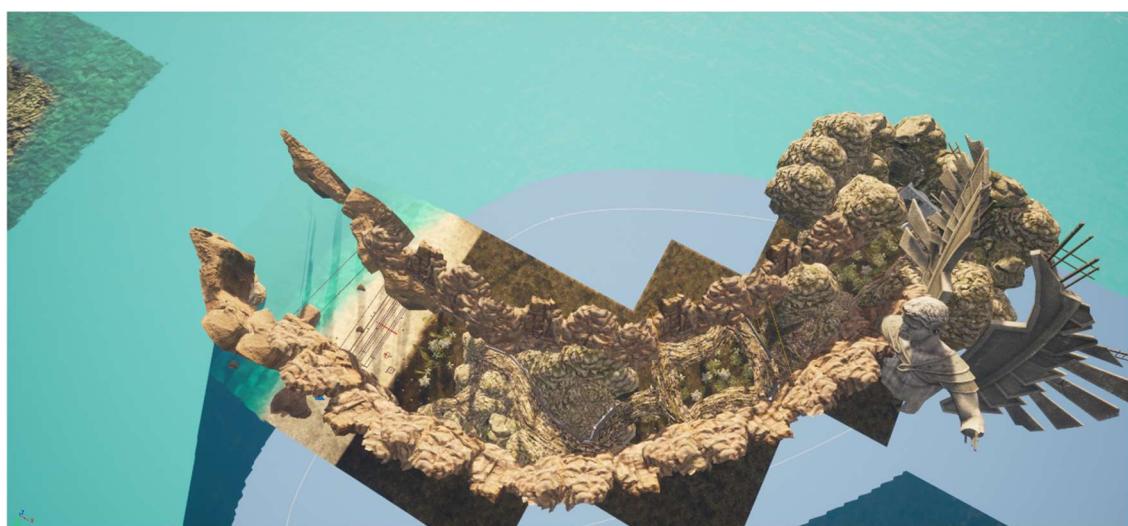
The game is focused on the player reaching the dungeon crypt where the cure is located. First the player has the race section where he must reach the top of the mountain but exactly at the last jump, he misses it and falls into the river that is connected to the ocean. That's why the player gets washed up at the beach. Over there he learns from a statue that he must complete the trials ahead to get access to the dungeon crypt and get the cure. After reaching the entrance of the cave he enters a ruin that is inside a mountain, which leads the way to the dungeon. After entering the dungeon, he makes his way to the crypt while clearing the puzzles and avoiding the enemies by hiding in the wooden coffin. At the end he finds himself at the entrance of the crypt maze and one of the doors opens to the crypt. After reaching the crypt he meets the antagonist who reveals his plans and takes control over Arthur.

- Focal Point

The focal points of the level are the statues in the beach and cave section. Then I have the health system on the left down corner and current objective system on top left side. In the bottom I have the UI page that comes up when the NPC is narrating a dialogue.

These are the overview pictures of the levels.

First is the beach section where the player washes up. It is also the place where the player gets in contact with a statue for the first time.



Third is a small cave that is inside a mountain. Player gets in contact with another statue over here.



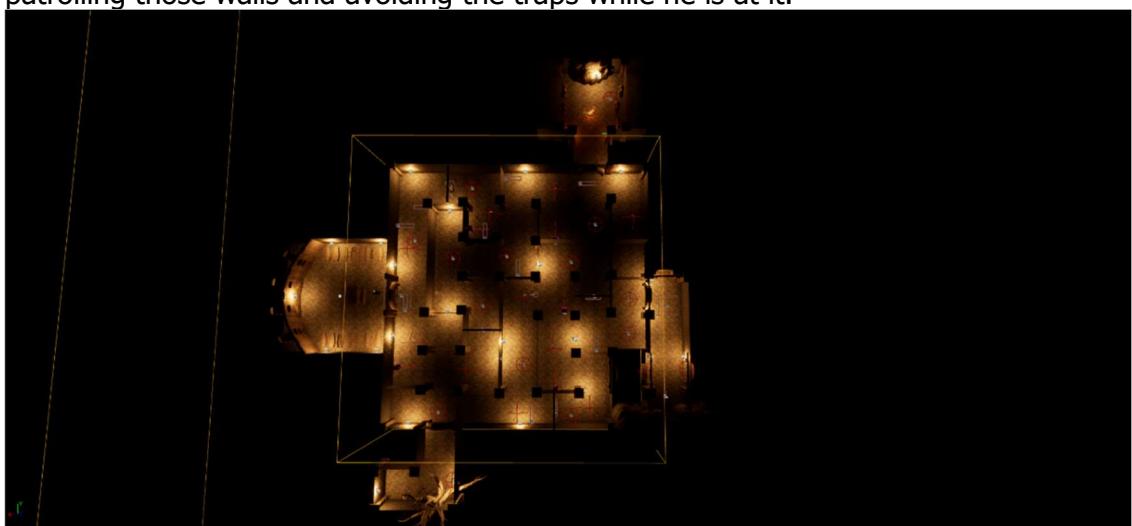
Fourth is the dungeon entrance from where the players actual journey starts.



Fifth is the middle section of the dungeon where the player must reach the other side of the map by hiding in the coffin boxes and not getting caught by the enemy.

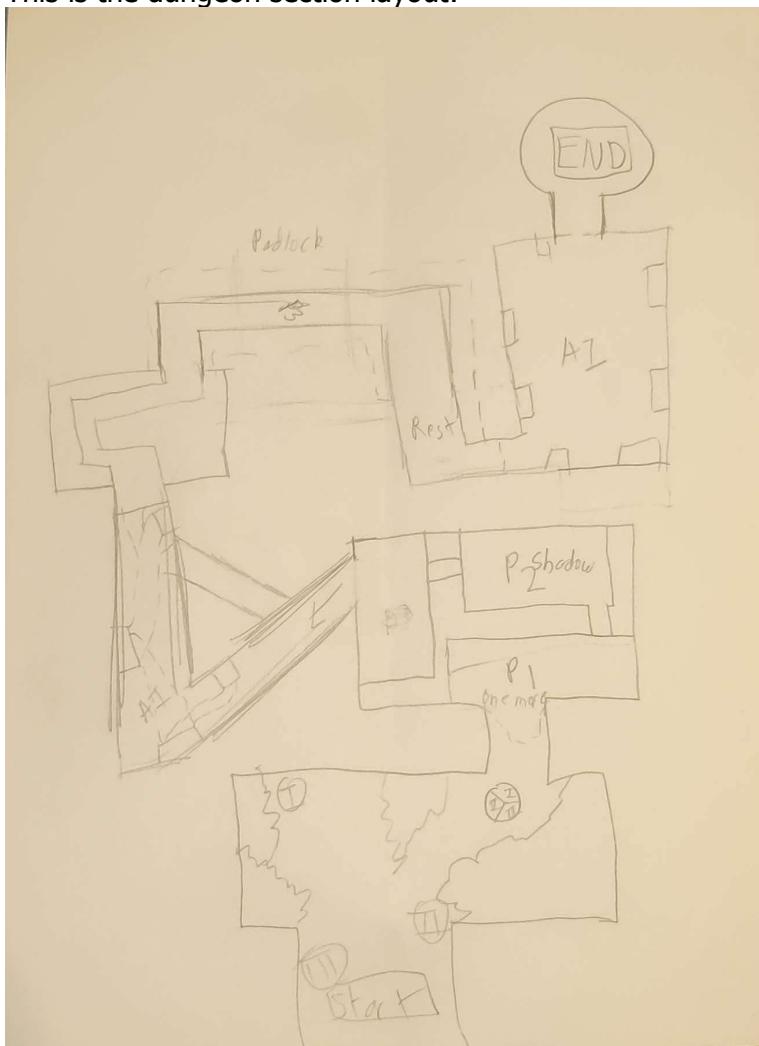


Sixth is the end section of the game where the player must go across a maze with an enemy patrolling those walls and avoiding the traps while he is at it.

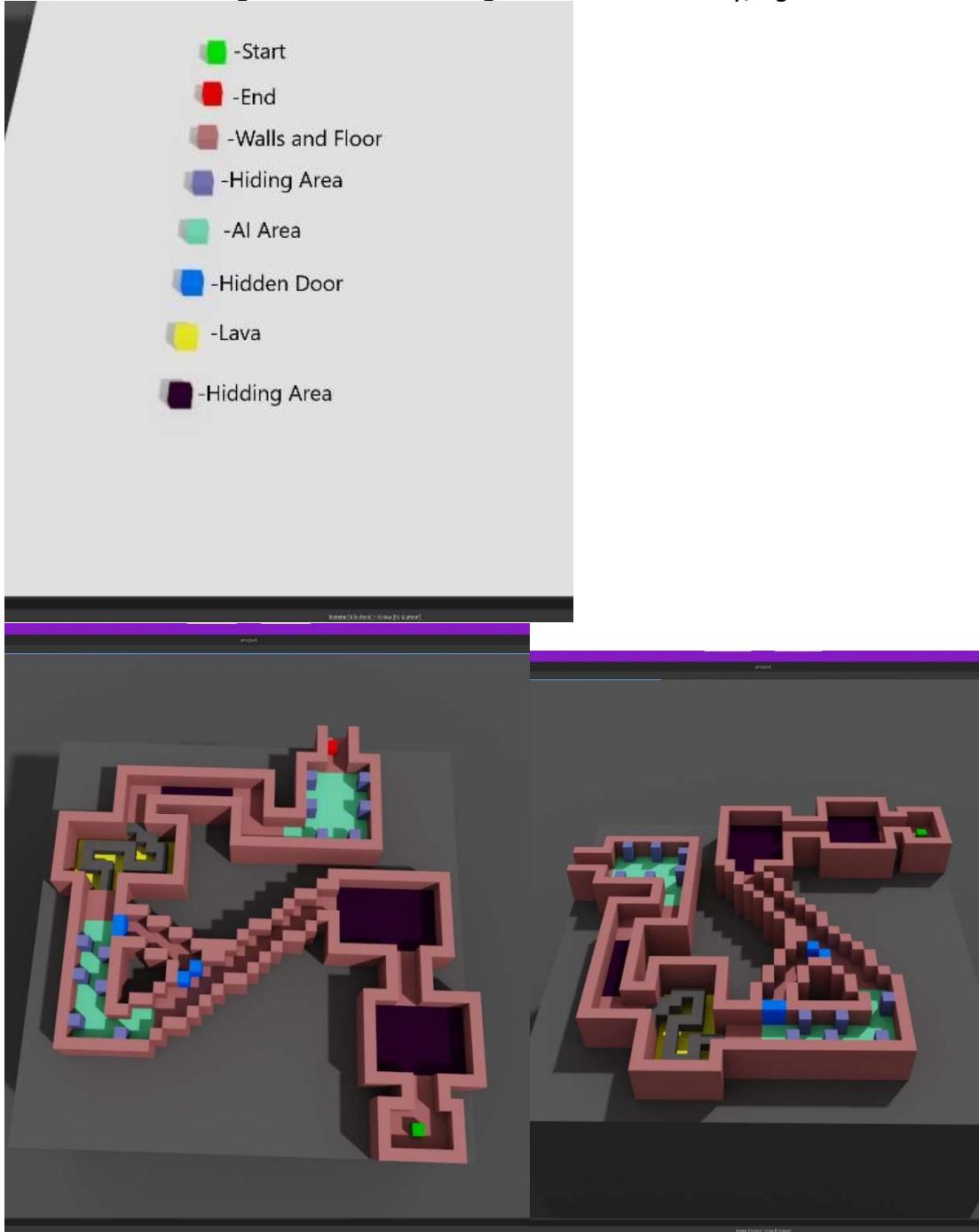


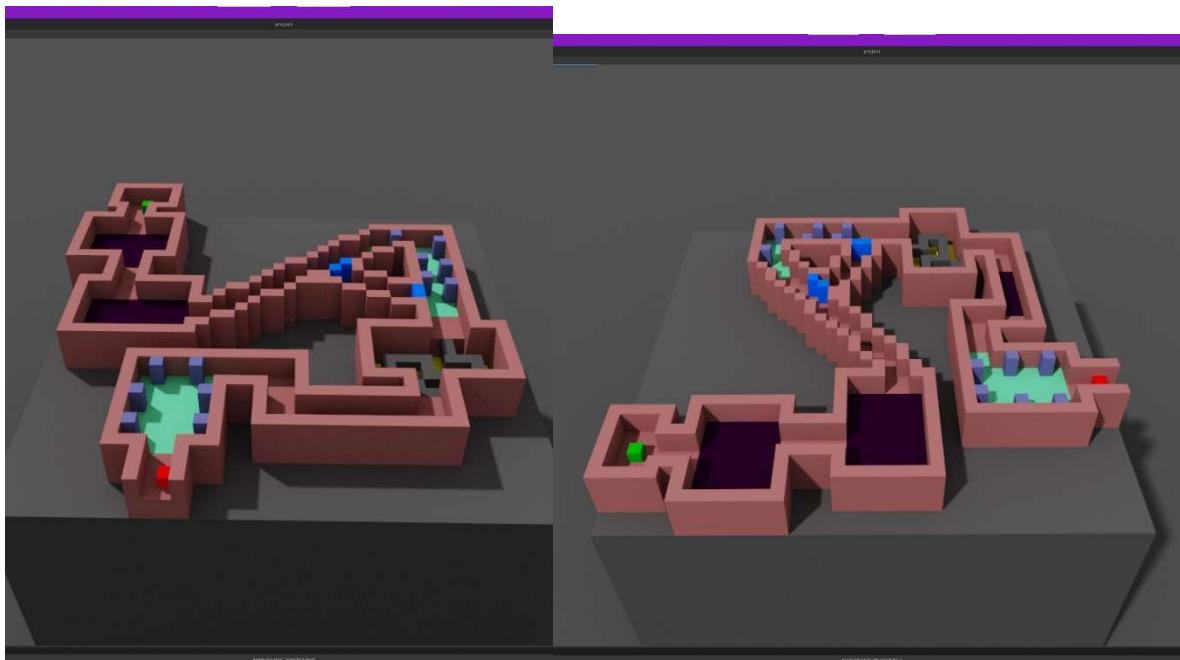
- Visual Development

This is the visual development of the level from the initial plan to blocking out to meshing.  
This is the dungeon section layout: -

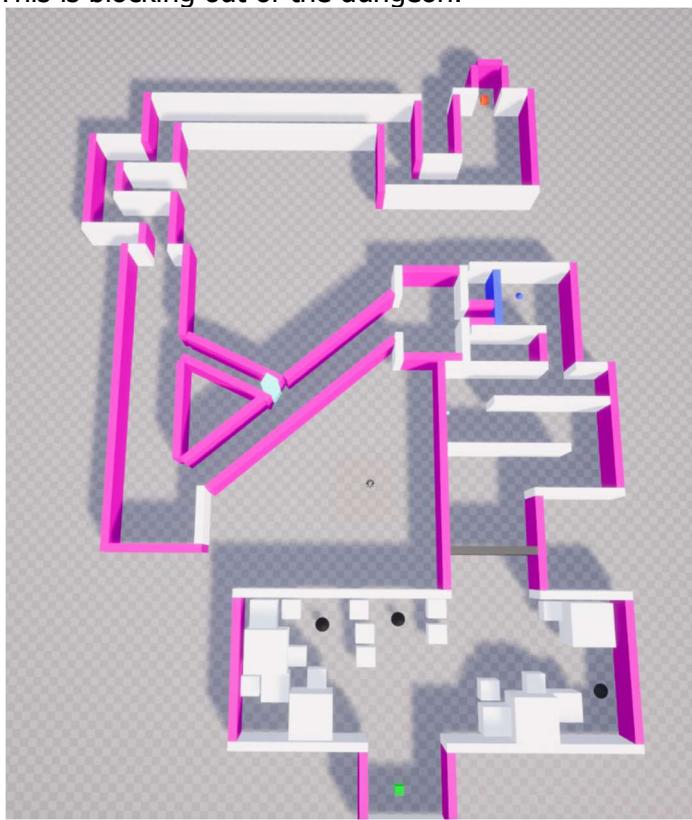


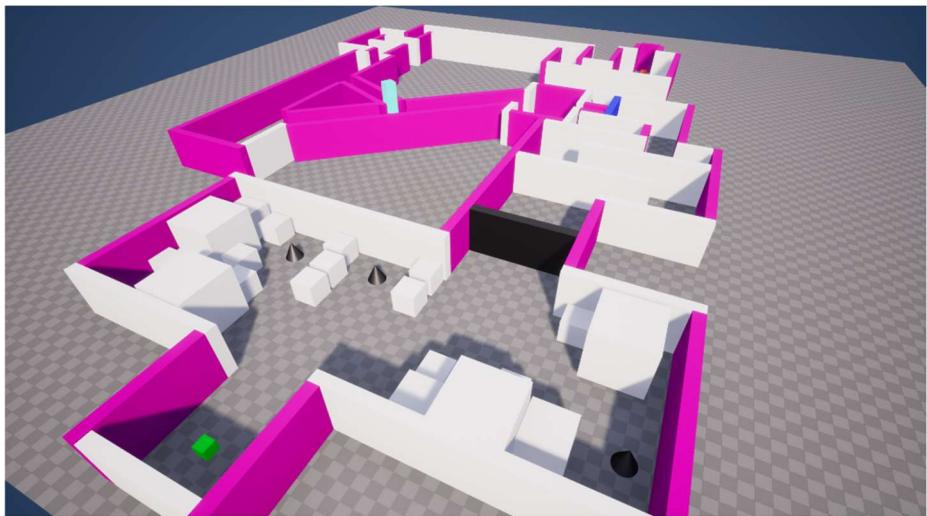
Then this is the design of the maze in magica voxel with the key/legend.



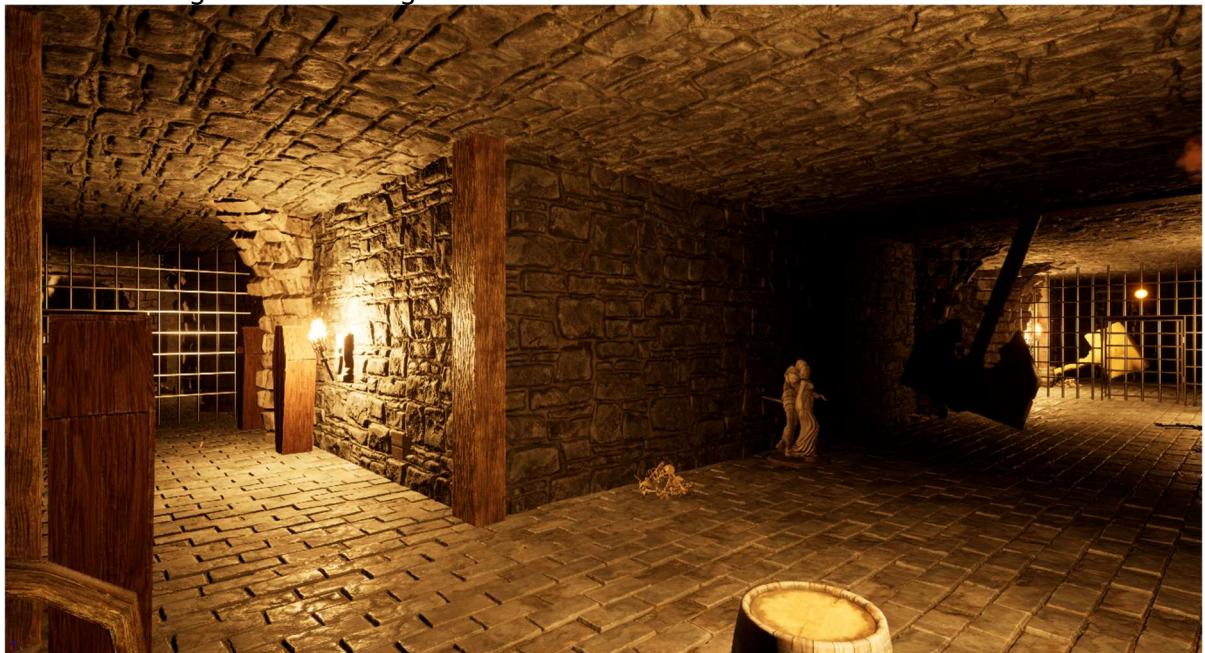


This is blocking out of the dungeon.

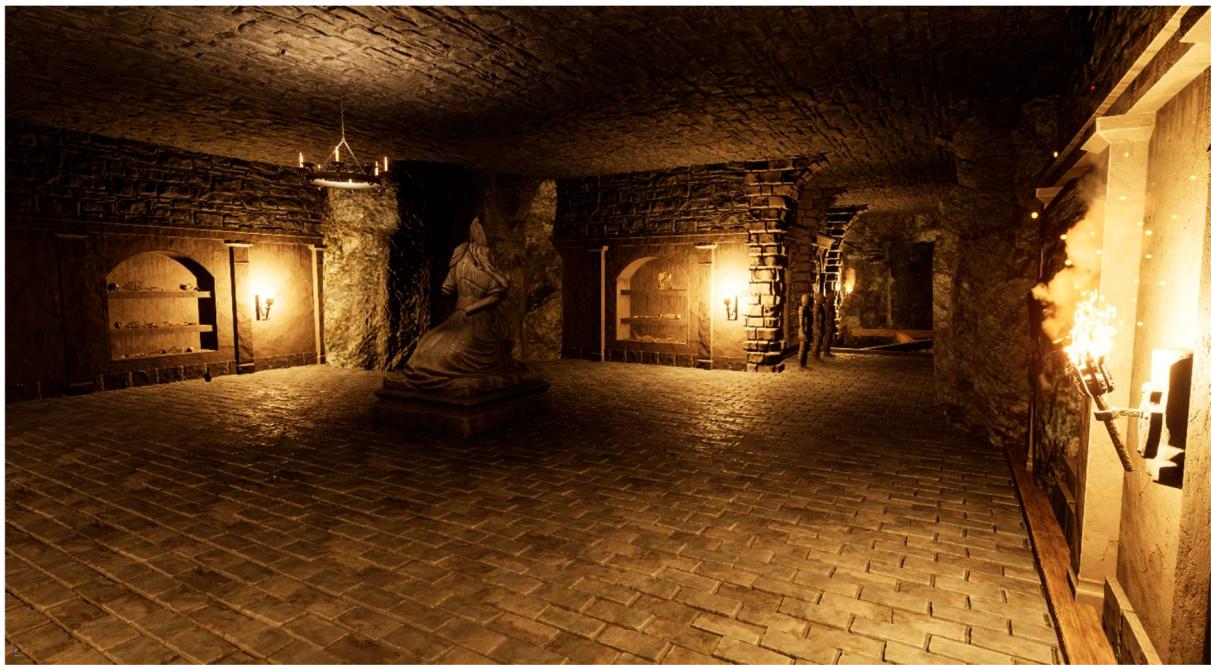




This is meshing out of the dungeon.





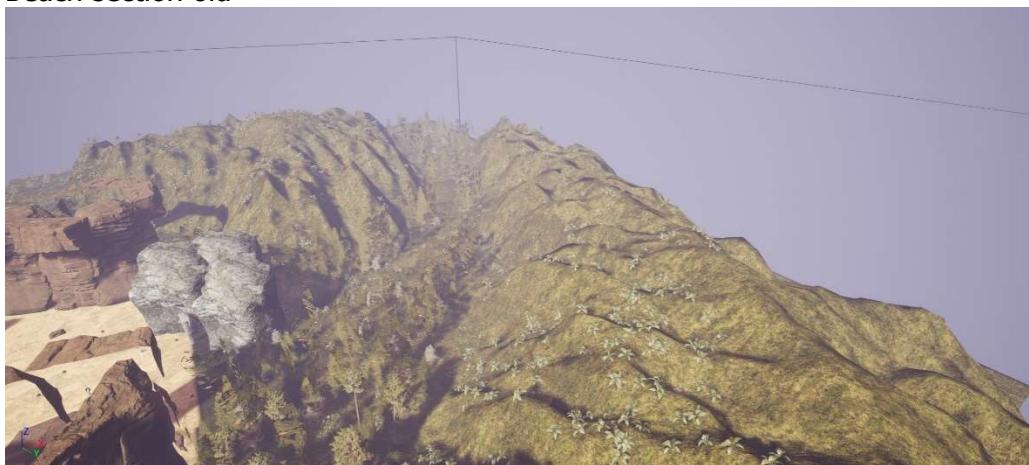


Here are a few pictures of the other sections of the game.

Beach Section new-



Beach section old-



## Cave Section-



- Gameplay Influences

The gameplay influence would be Skyrim and uncharted 4 as I have tried to make mechanics based on those games. Like the puzzle from Skyrim and examination mechanic. From uncharred the level design ideas.

- Color Palette

The common colors are brown, grey, and blue due to the theme being set of ruins and castle.

Beach Palet-



Cave Palet-



Dungeon Palet-



- Lighting

The lighting in the game is a bit dark as the theme is of an old runic temple so the only means of light is the torches and the flashlight the player has.



- Asset List

There were 5 Asset packs I used. I have only used a few elements from each asset pack.

1. Infinity grassland.



2. Infinity Blade props.



3. Kite Demo.



4. Medieval Dungeon.



5. Soul cave.



Got the sound effects from unreal engine itself and downloaded some from online which were royalty free.

## Level Design Plans

- Focal Point Location

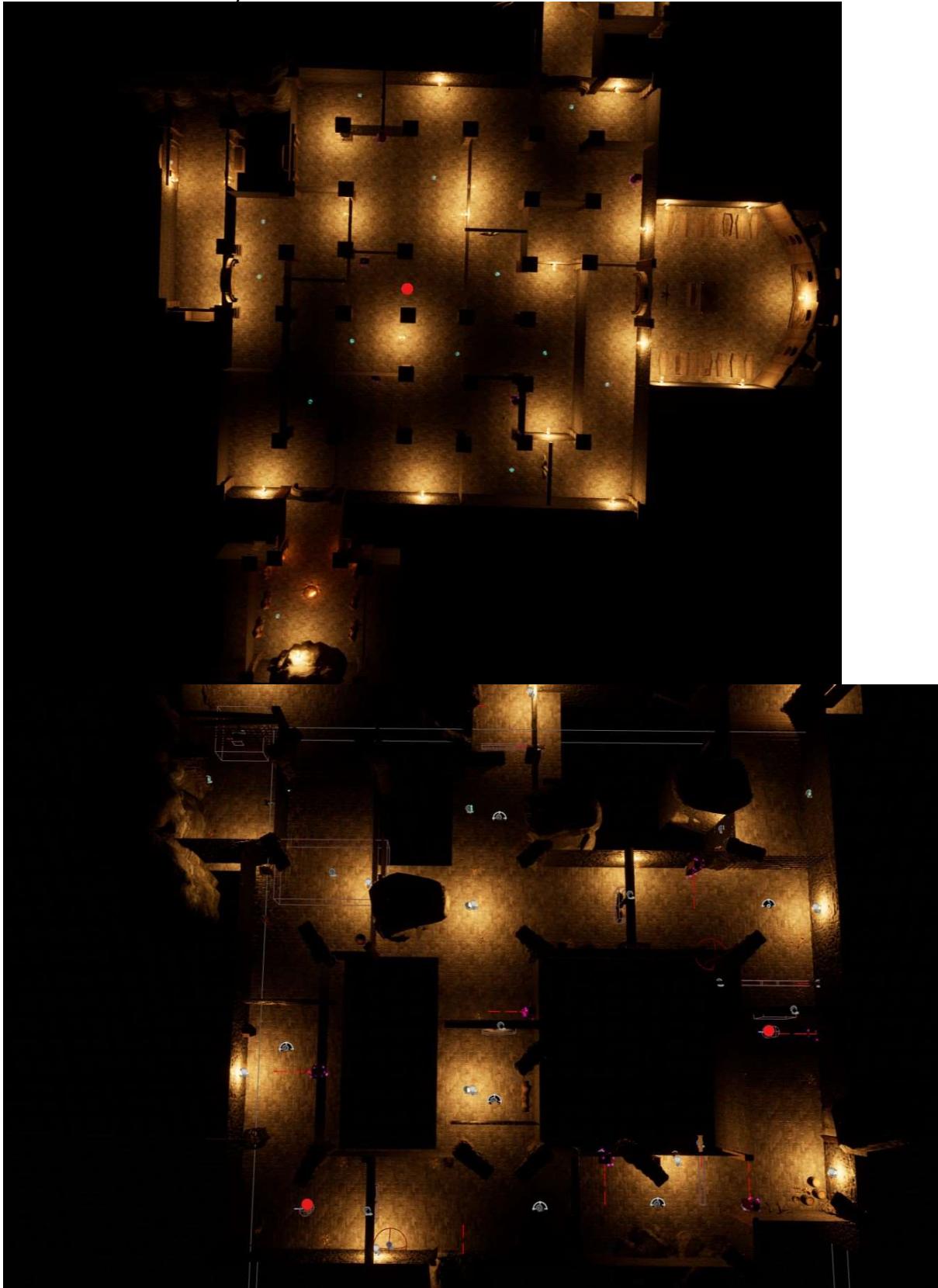
The focal point of the game is the dungeon itself and the cave before the dungeon to give the player a feeling or sensation of being on a dungeon.

- Story Element Locations

The story element location is the dungeon crypt and the beach section.

- Enemy Locations

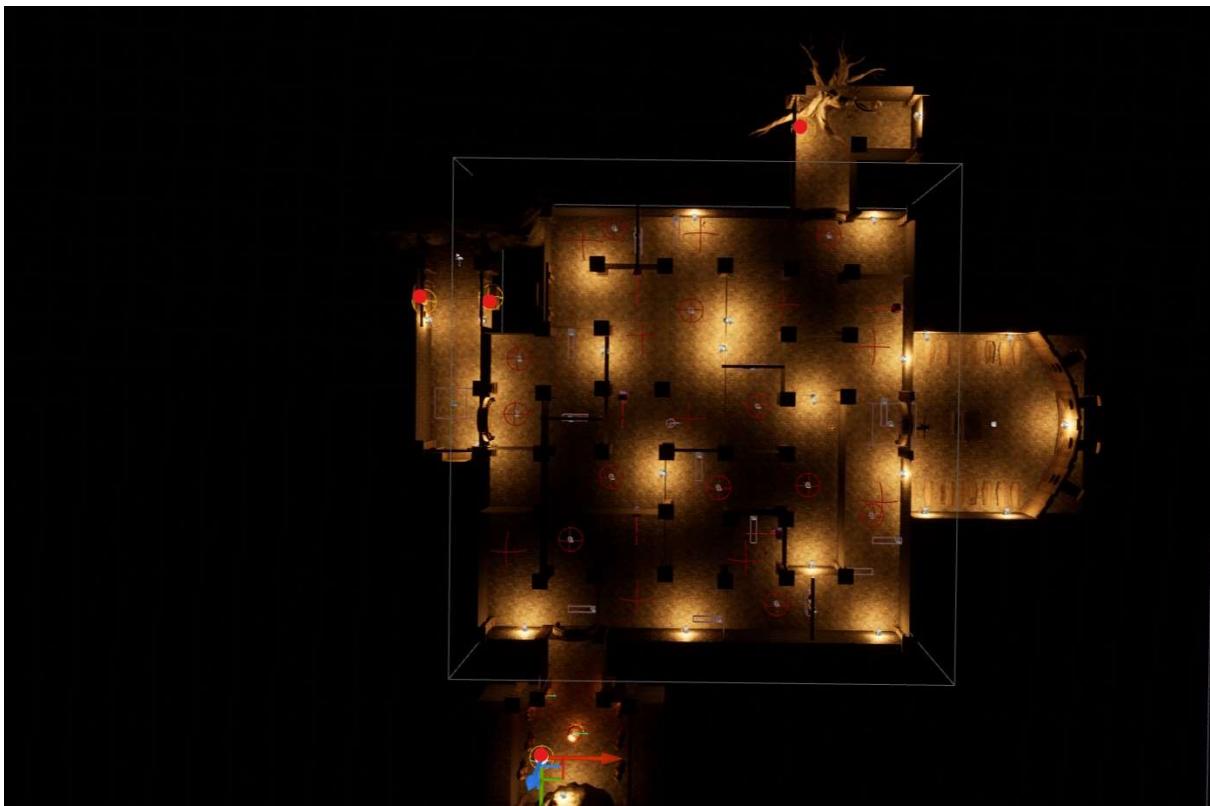
Red color- Is the enemy location.



- Pickup Locations

These are the pickup Location of any pick-up.  
Red color- Is the object location.





- Level Start & Level End Location

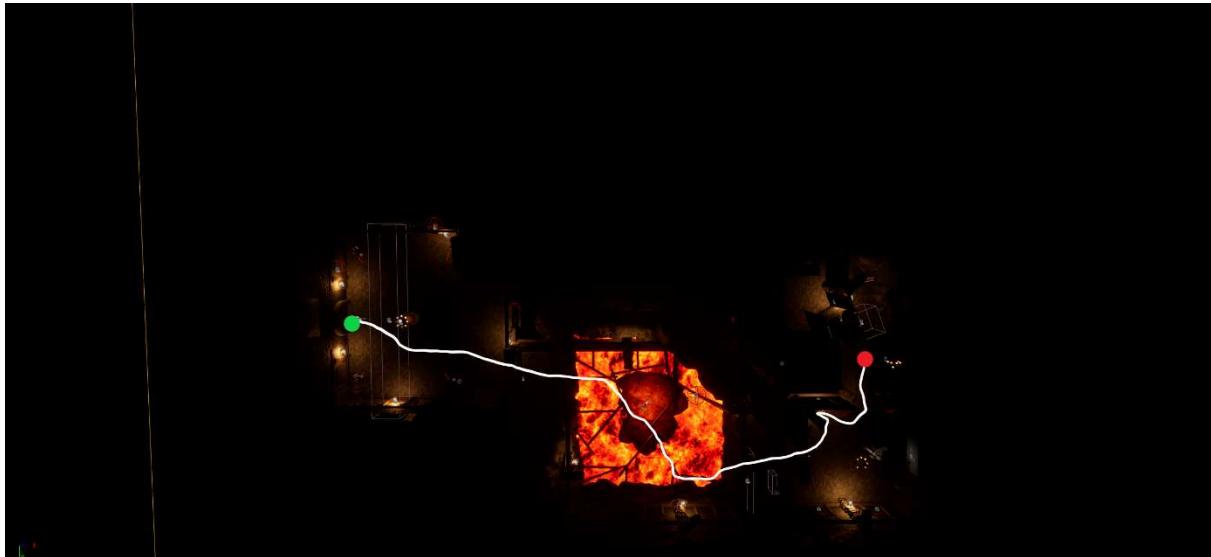
Here are all the start and end locations of the levels.

Black and grey lines are the path. Green is start and Red is end. It also shows the level flow.

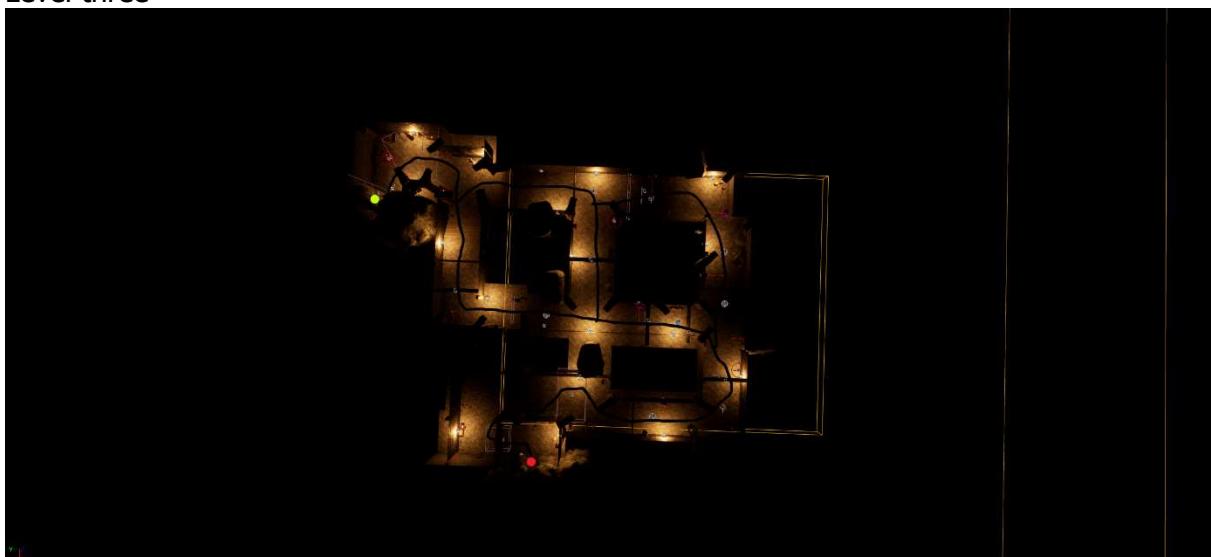
Level one-



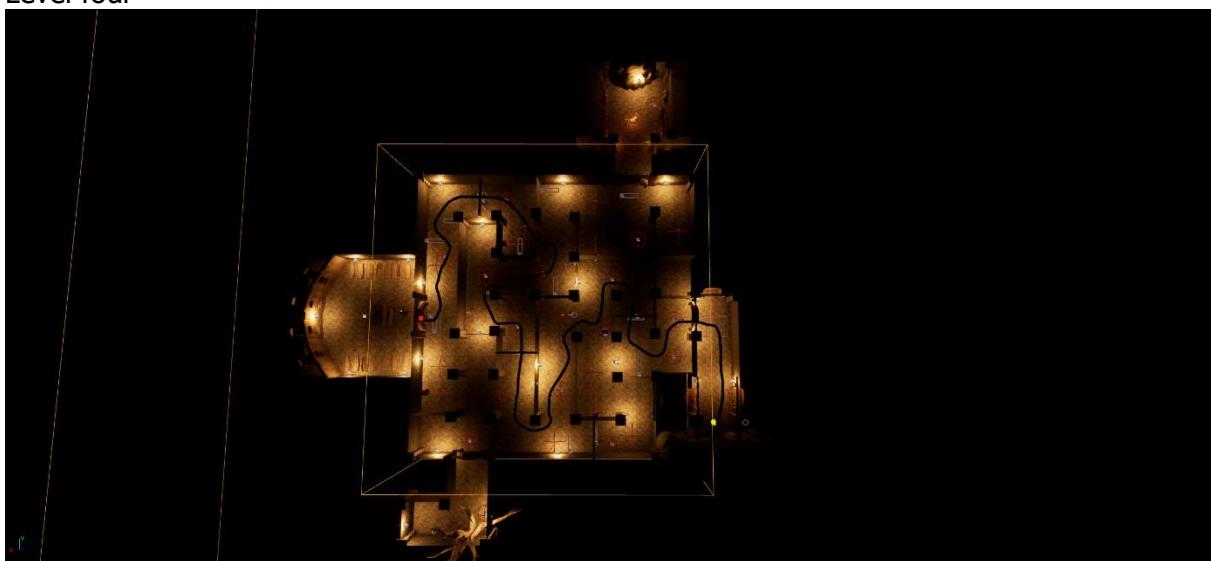
Level two-



Level three-



Level four-



- Quest Design  
I have divided the quest in each level. First is the beach where the player learns control a bit and guide him to cave. In cave it is about clearing the puzzle, and this goes on till dungeon middles section over there the player must reach the other side without getting detected and this goes on till the crypt then the game ends.

### **Scripted Sequence documentation:**

- Camera Shots and Timing

I have 4 Camera shots in the game. Here is a list of where they are, what their purpose is and the time length.

1. Beach- waking up of player- 7.02 seconds.
2. Dungeon-Rocks falling from the roof and blocking the area- 2.02 seconds.
3. Dungeon-Rocks move and open a secret pathway- 2.50 seconds.
4. Dungeon- Doors open and reveal the antagonist- 1 minute 4 seconds.

- Special FX

I have few VFX which are as follows-

1. Fire particle effect.
2. Interactable objects effect.
3. Stars effect for the trailer.
4. Shooting star effect for the trailer.

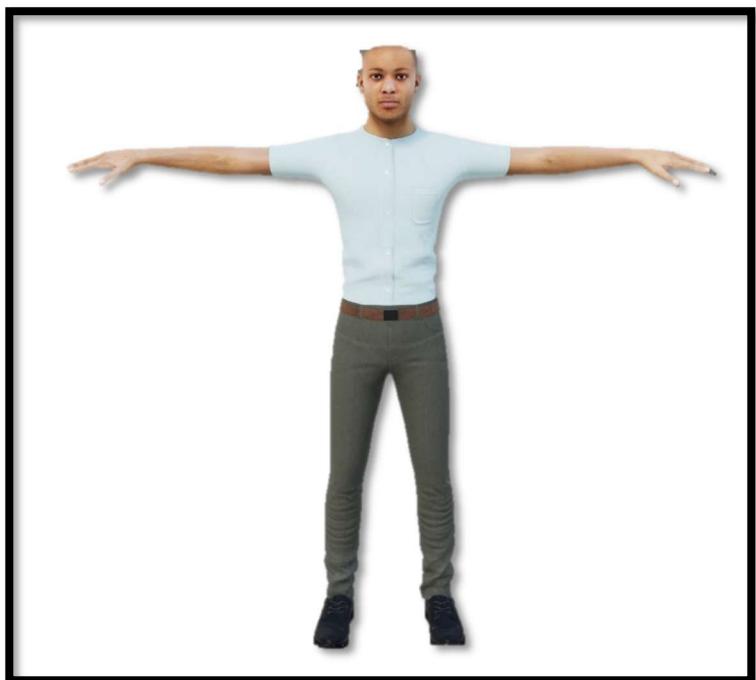
- Audio

I have 11 SFX.

1. Voice over for Statue on the beach.
2. Voice over for Statue in the cave.
3. Voice over for antagonist in the end cinematic.
4. Door Opening.
5. Rock falling or sliding.
6. Wooden door opening.
7. AI sees the player.
8. Walking on rock.
9. Walking on grass.
10. UI button hovers and press sound.
11. Game Main menu Background Sound.

- Character Animation

I have 7 animations in total of both the characters.  
Here is a list of the characters and their animation.



Arthur

1. Getting up
2. Idle
3. Agony



Antagonist

1. Getting up
2. Idle
3. Raising arm
4. Head butting

- UI Control

I have an inventory System in which the player can store quest items, health, and battery. I also have item inspection, note text reading.

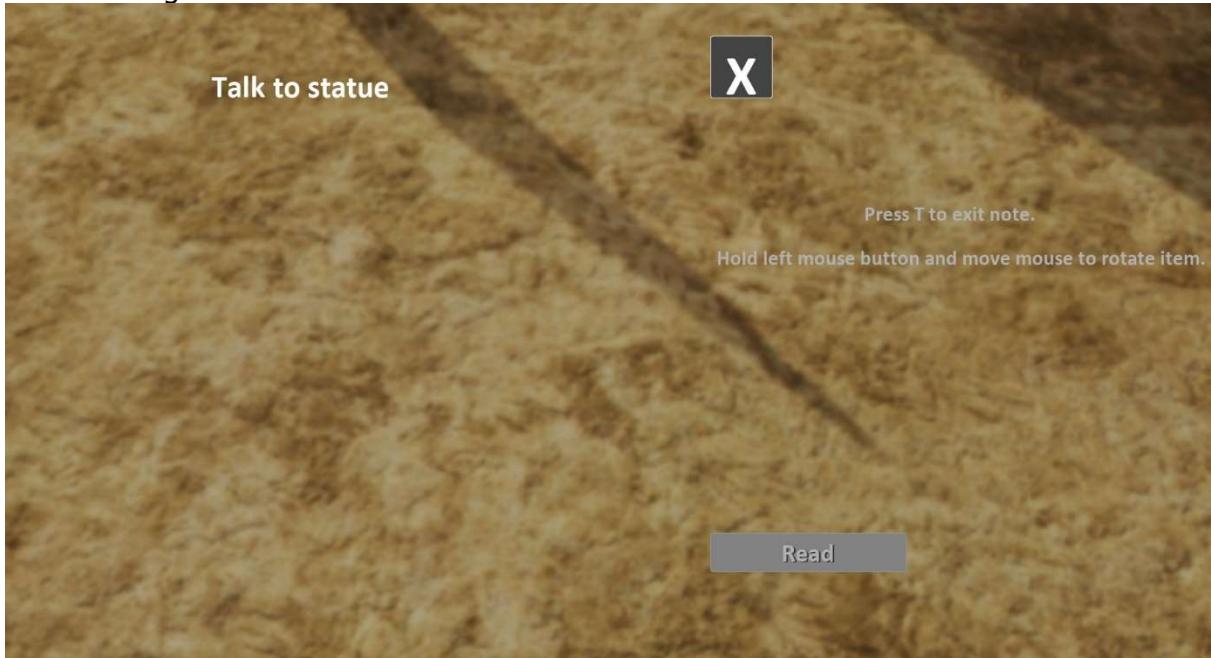
Inventory



Item Inspection



## Note Reading



## Note examination



I have the main menu, pause menu and level select menu.

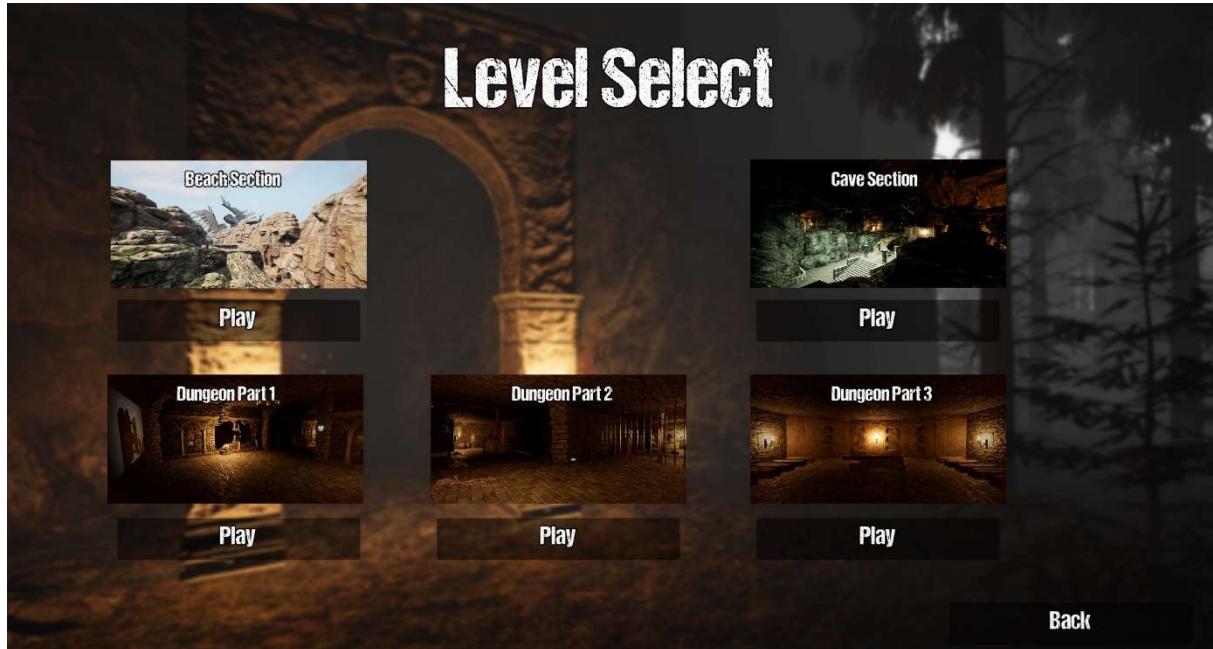
Main menu-



Pause menu



Level select menu



- Asset List  
I have downloaded 2 Character Animation and assets from mixamo for cinematics.

## Player Characters, Controls and Abilities

- Player Controls and Map

W-Move forward

A-Move Left

Ctrl-Crouch

E-Interaction key

D-Move Right

Q-Peak Left

R-Peak Right

P-Pause Menu

Tab- Inventory

Left mouse button- select or hold.

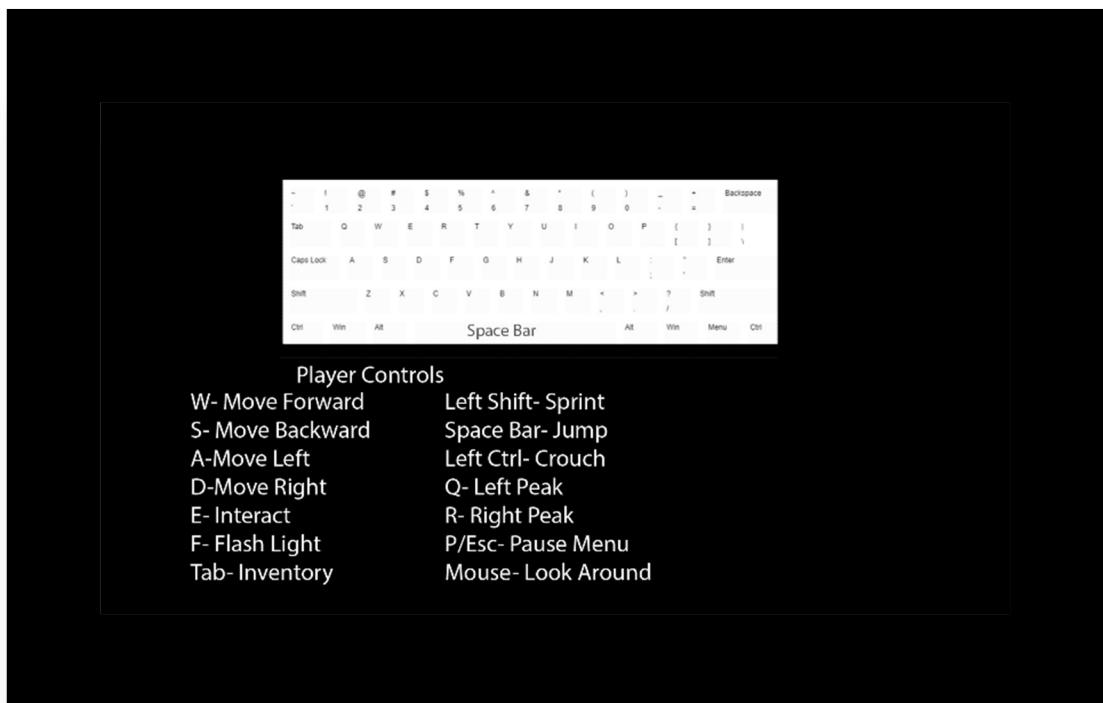
T- Reset

S- Move Back

Space Bar- Jump

Left shift- Sprint.

F- Flash Light.

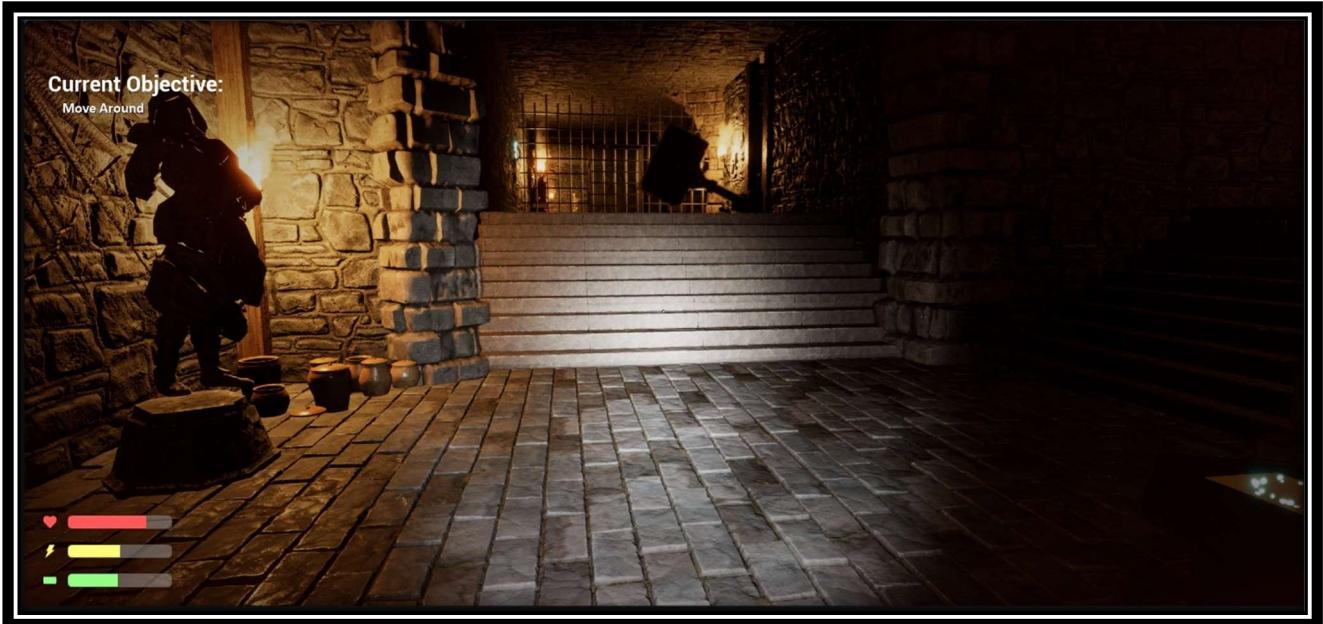


- Player Camera

I have focused on mimicking the camera style of Skyrim as the first-person view of that game is amazing considering the game genre type I have. One of the best game camera views is the first perspective.



Player's perspective in game.



- Character/s background

Arthur grew up in a peaceful village, known for its close-knit community and simple way of life. He was a kind-hearted and compassionate young man, always ready to lend a helping hand to his neighbors. Arthur shared a special bond with his mother, who raised him with love and wisdom.

When the plague struck the village, Arthur's world crumbled. He witnessed the suffering and loss of his fellow villagers, including his beloved mother. Determined to find a way to save her and the others, Arthur embarked on a treacherous journey to the Island of Drahcroderin, driven by a deep sense of love and responsibility.

Throughout his quest, Arthur displayed unwavering determination and resilience. He faced the dangers of the island with courage, fueled by the hope of finding a cure and restoring his village to its former peace. As he confronted hardships and made difficult choices, Arthur's character evolved his once vibrant eyes now milky white.

Arthur's journey was not only a physical one but also an emotional and moral one. He grappled with the consequences of the cure and the addictive nature it instilled in those who consumed it. Despite the challenges and complexities, he faced, Arthur remained driven by his deep desire to bring salvation to his people.

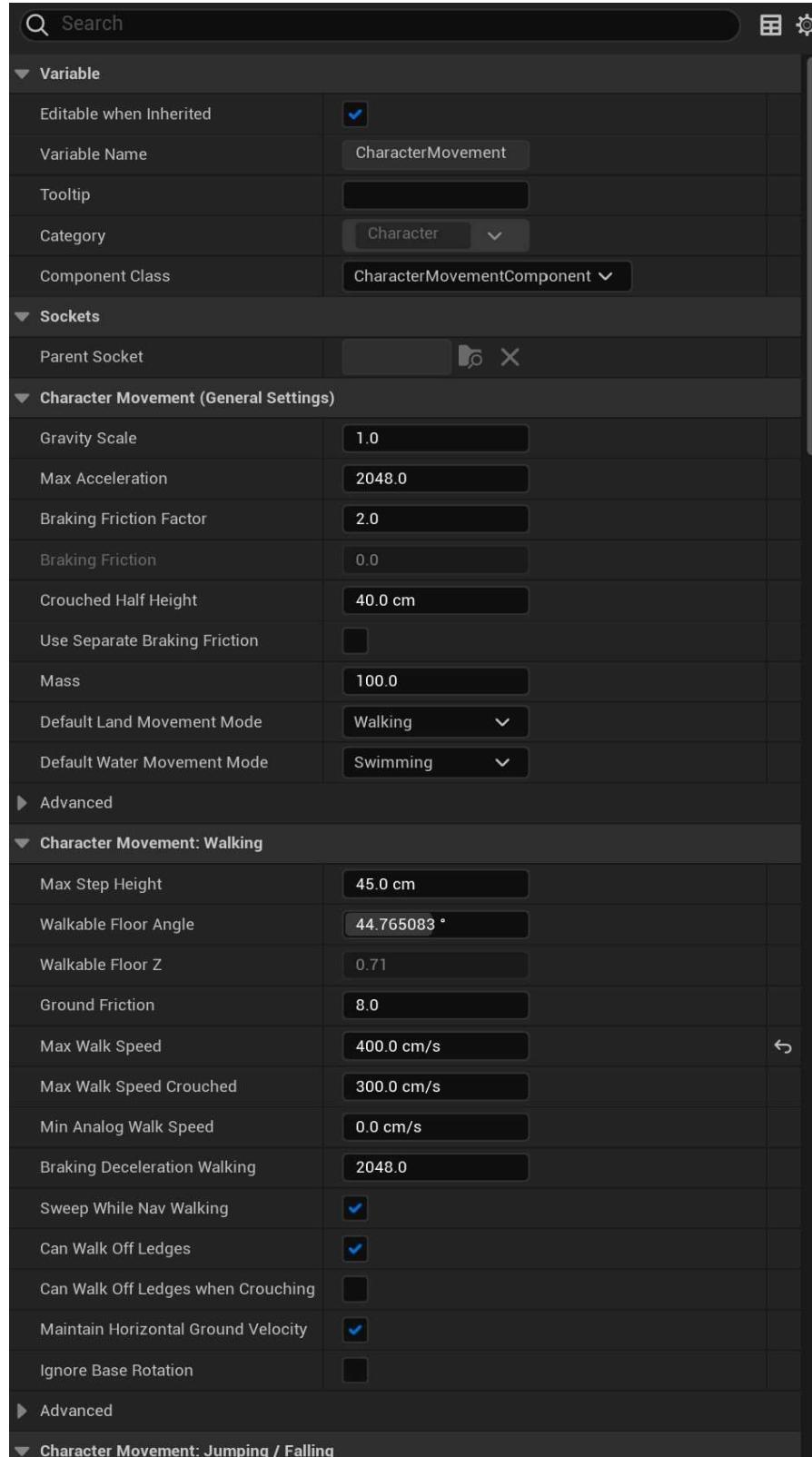
In the end, Arthur became a symbol of sacrifice, the child of Drahcroderin who bridged the gap between hope and addiction. His story serves as a cautionary tale, exploring the consequences of seeking salvation without fully understanding the price it demands.

## Character/s Mechanics

He can move around, interact with things, has a flashlight, has inventory.

- Character/s Physics

- Movement



After a lot of playtesting, I felt like these stats worked best for the character as they were matching with the game speed and did not make the game look slow-paced and make the player bored of the slow speed.

## **Weapons and Pickups**

Game Pick ups

- Health Pick to increase health.
- Battery Pick up to increase torch battery life.
- Items that can be examined like notes and objects.

## **Game Conditions**

- How do you win?

The player wins by entering the dungeon crypt.

- How do you lose?

The player losses if he is unable to open the dungeon and gets killed on his journey.

- Can you die?

Yes, the player can die if he is killed by an enemy, gets hit by a trap and the health drops below 0 percent and the last is the player falling off the map.

## **Rewards and Progress**

- Achievements based on player type such as explorer.

The reward that the player gets after evading the enemy and proceeding ahead is only him getting closer to the crypt.

## Enemy Design

- Enemy Physics

These are enemy physics.

The screenshot shows the configuration interface for the **CharacterMovementComponent**. It includes sections for **Variable**, **Sockets**, **Character Movement (General Settings)**, **Advanced**, **Character Movement: Walking**, and **Character Movement: Jumping / Falling**.

**Variable** settings:

- Editable when Inherited:
- Variable Name: CharacterMovement
- Tooltip: (empty)
- Category: Character
- Component Class: CharacterMovementComponent

**Sockets** section (Parent Socket dropdown menu):

**Character Movement (General Settings)** settings:

- Gravity Scale: 1.0
- Max Acceleration: 2048.0
- Braking Friction Factor: 2.0
- Braking Friction: 0.0
- Crouched Half Height: 40.0 cm
- Use Separate Braking Friction:
- Mass: 100.0
- Default Land Movement Mode: Walking
- Default Water Movement Mode: Swimming

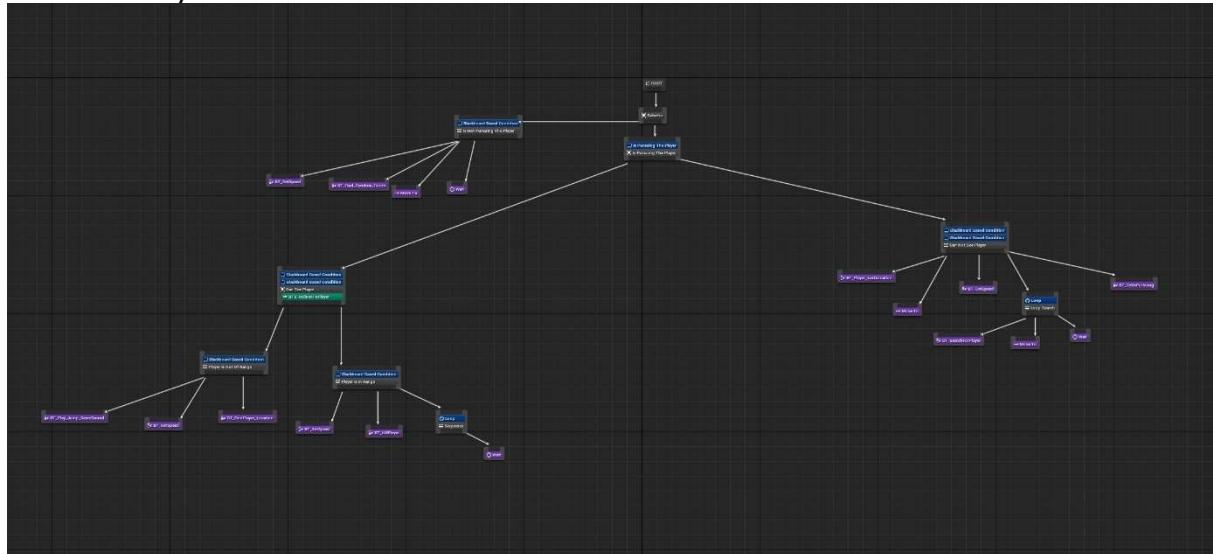
**Advanced** section (disabled):

**Character Movement: Walking** settings:

- Max Step Height: 45.0 cm
- Walkable Floor Angle: 44.765083 °
- Walkable Floor Z: 0.71
- Ground Friction: 8.0
- Max Walk Speed: 600.0 cm/s
- Max Walk Speed Crouched: 300.0 cm/s
- Min Analog Walk Speed: 0.0 cm/s
- Braking Deceleration Walking: 2048.0
- Sweep While Nav Walking:
- Can Walk Off Ledges:
- Can Walk Off Ledges when Crouching:
- Maintain Horizontal Ground Velocity:
- Ignore Base Rotation:

**Character Movement: Jumping / Falling** section (disabled):

- Enemy Behaviour characteristics



- Enemy Abilities

The enemy can move around, follow players and attack player.

- Enemy Theme

The enemy theme came from multiple games like Skyrim and Elden ring etc.