THE FOOL

An interactive experience created by Simon Meyer

The Fool from the Rider-Waite Tarot deck

*The Fool from the Light Seers Tarot deck*

Introduction

"The Fool" tarot card embodies the ideas of embracing the unknown or starting a new journey. It can also imply recklessness, and that the subject should consider their next step carefully. It could also mean that the subject has an idea that they haven't brought into the world yet - a journey that they haven't started yet, and need to take a risk to begin.

The reversed meaning suggests recklessness, and that the subject is disregarding the consequences of their actions - putting them at the risk of harming themselves or others.

For *The Fool Experience*, the intention was to walk the line between the negative and positive meanings of the card. The player is on the precipice of beginning a new journey, but there are hints that it may be dangerous.

This is a roughly 15 minute long experience based on the
Fool card, intended for general audiences who enjoy fantasy.
It will begin in a small mining town, then the player will find
a key object that will open a large gate that leads into a hub
area within a cavern. Crystal caves and ancient ruins will
influence the design of this area. The player must gather 4
more key objects in whichever order they choose to open the
gate in the hub area. Once the player passes through this
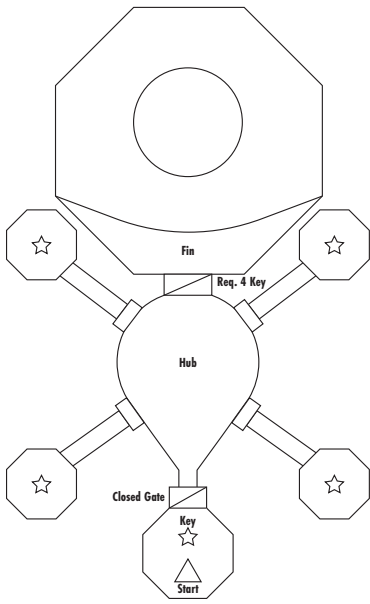gate, the experience will end.
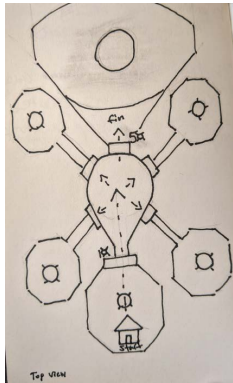
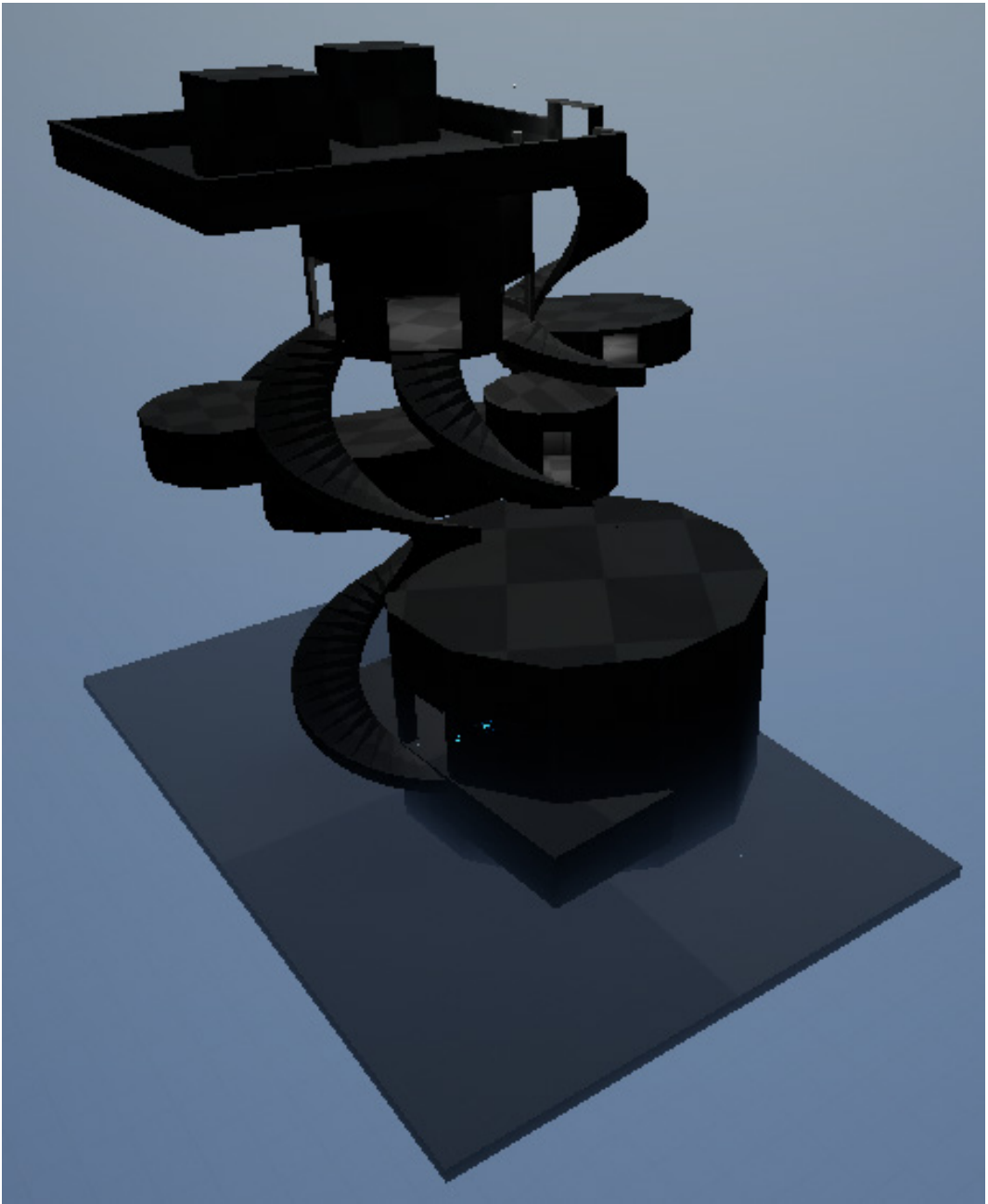*Level design diagrams and statement, top view*
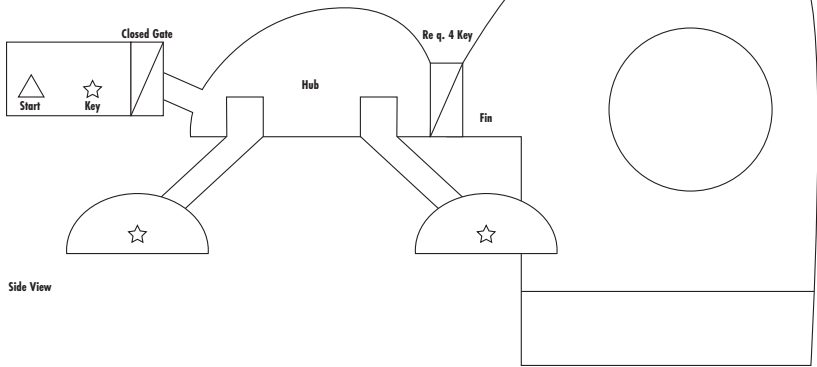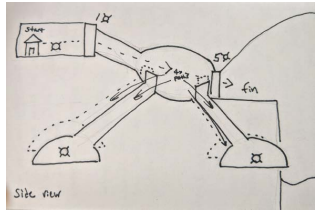

Level design diagrams, side view

Graybox of first level design iteration, adding verticality to the design
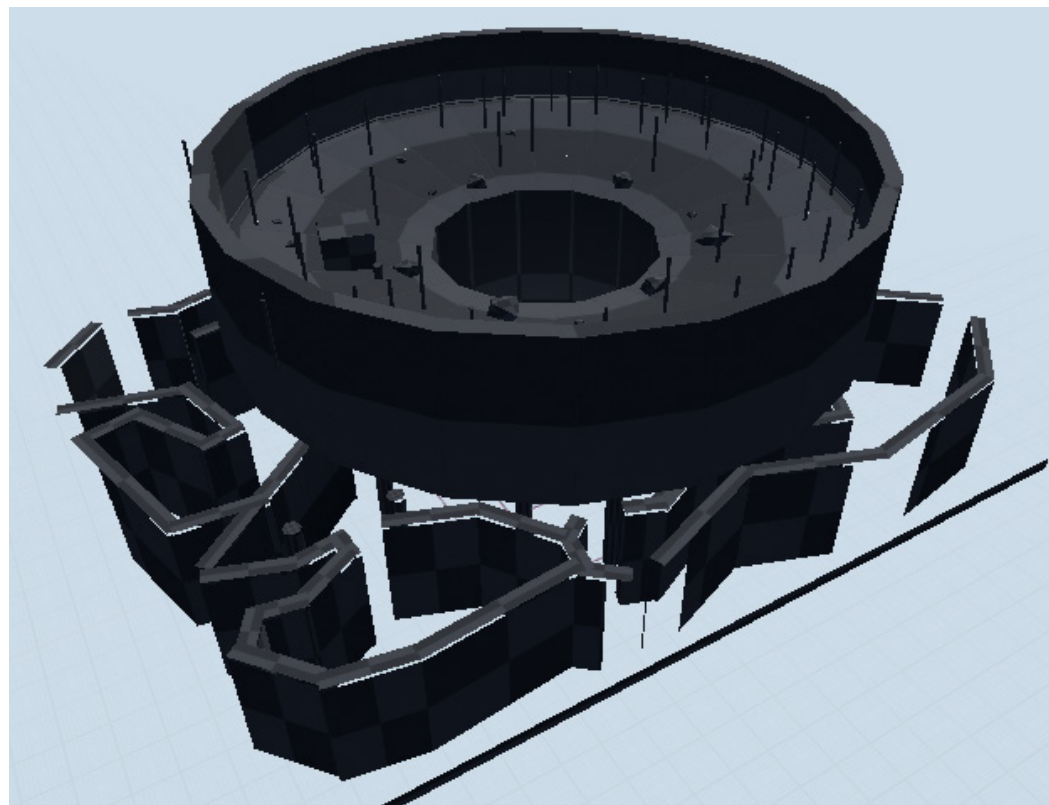
Initial Concept

The concept for The Fool Experience started
as a level with branching paths leading
outwards from a hub area. Each path would
lead to a room that contained a collectible,
and once all four collectibles were obtained,
the player would unlock a door that lead to
the end of the experience.

The experience was originally intended for VR,
with a focus on sound design and interactivity.

This design was adapted to a grayboxed
level in Unreal, but proved to be tedious to
navigate for players, and forced too much
repetition by leading the player back to hub
using long stair-like paths.
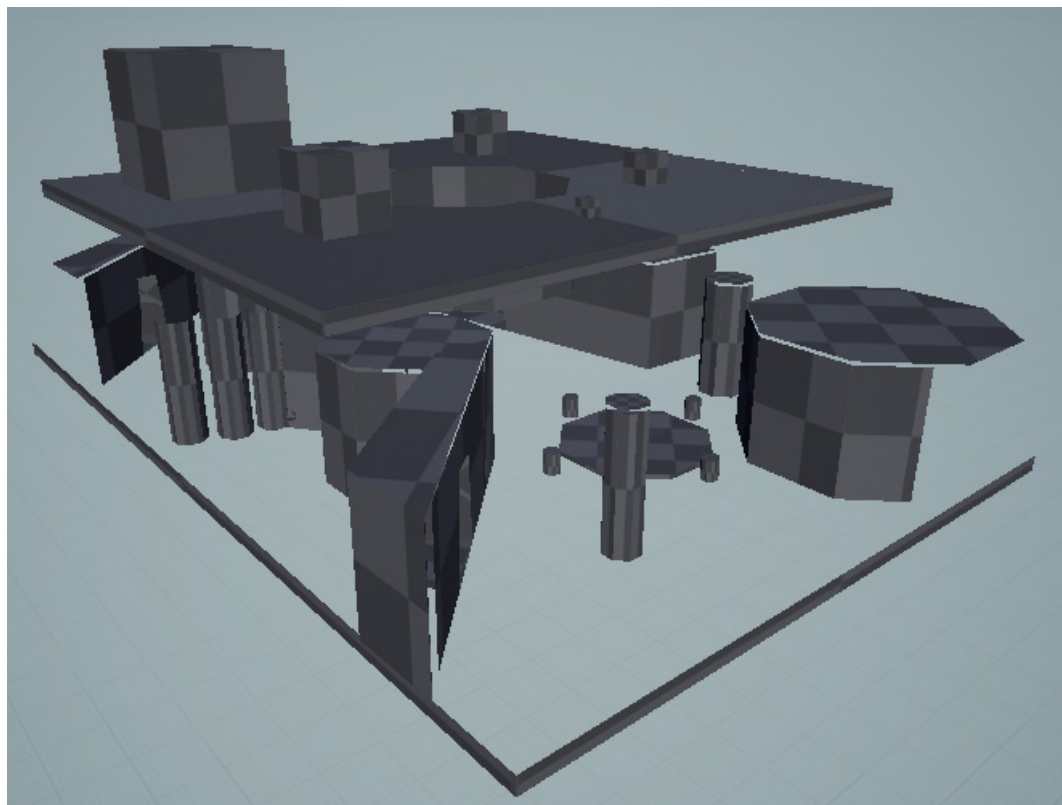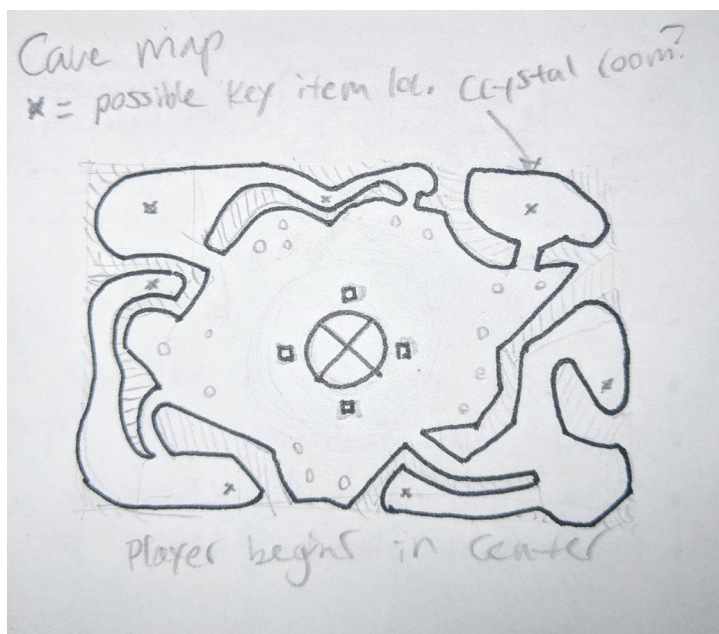
Second iteration of graybox using new layout

Third graybox, refining layout further

Alternate level layout sketch used in final graybox

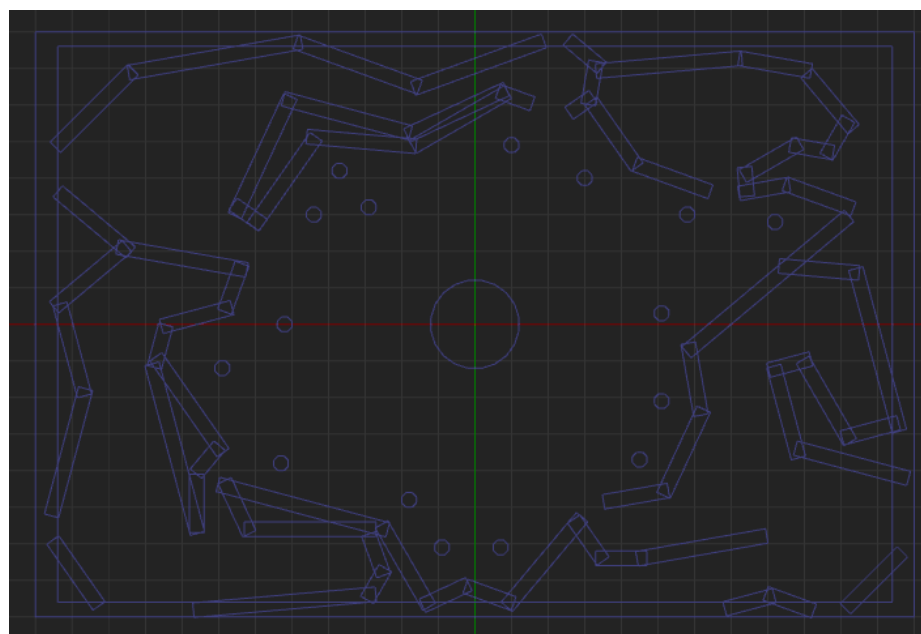*Interpreting layout sketch into final graybox*

Concept Refinement

Due to the first design being too tedious to navigate, the graybox was modified to join all of the collectible items into one space instead of having tunnels or staircases connecting them. The starting area was placed on top of the main area, and the spaces connected via a large hole that the player would fall down into.

It was shortly after this final graybox was created that the university switched to fully online delivery. Due to this switch, developing the experience for VR was no longer possible, and the design had to be reconsidered.

The starting top level was cut entirely in order to put better focus onto the main area of the experience. Some of the interactivity ideas that were intended for VR, such as picking up objects and simple puzzles, had to be cut as well.

Visual Inspiration

The environment for the experience was based off of images of real-life caves, specifically the Three Caves Park in Huntsville, Alabama. Since the project was originally intended for VR, research was put into creating rock formations in a low-poly style.

The meshes that had been created up to this point for the experience were done in a low-poly style to aid in performance, and many had to be revisited to add extra detail when development switched to desktop.

Photo of the Three Caves Park, the ceiling and walls influenced the meshes created for the experience

Another photo of the Three Caves Park with different lighting conditions
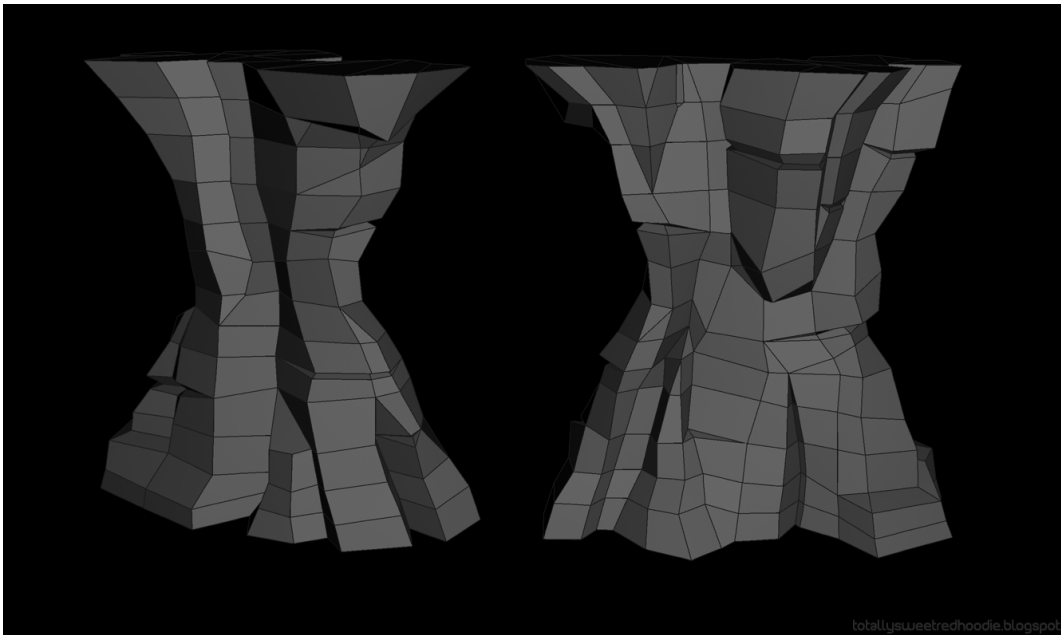
Reference meshes found online for inspiration, cave walls
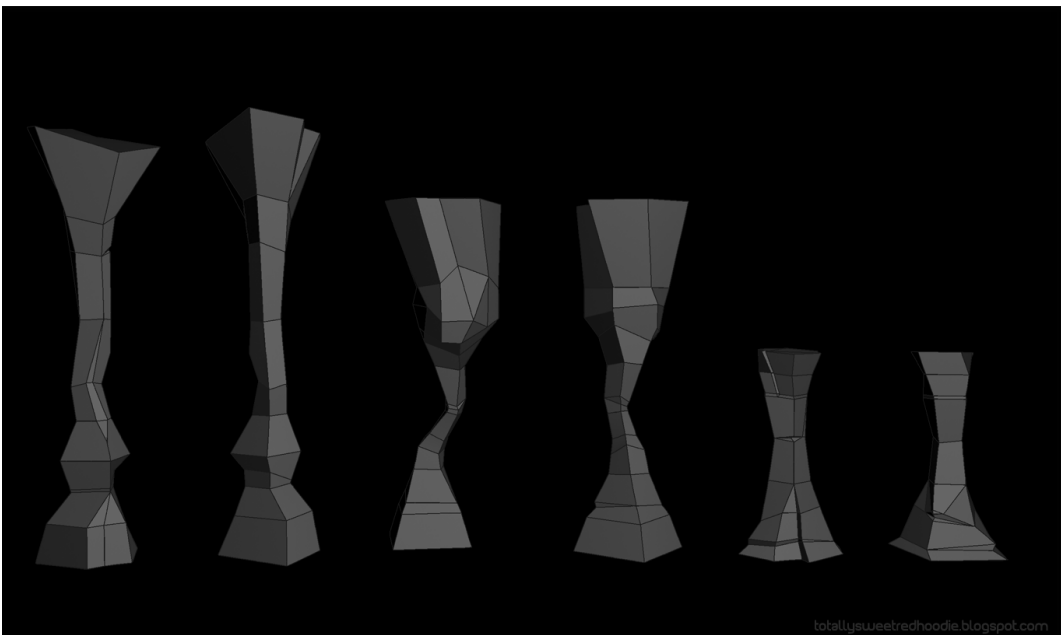
Reference meshes found online for inspiration, stalactites and stalagmites

Screenshot of the alpha build of the game, showing the original low-poly cave walls

Alpha Build

The goal of the alpha build was to assemble all resources in one place. Some basic functionality was added for the HUD, but was primarily a room that could be walked around in and explored.

This alpha build led to the desire for more objects within the space, especially in the center area near the portal where the player spawns. This center area is quite large, and having only one object in the center made the experience feel too expansive.

This is also when experimentation with the lighting began. The original vision was meant to be contemplative, but considering that the experience had changed significantly, the tone had to shift as well.

Level layout of the alpha build
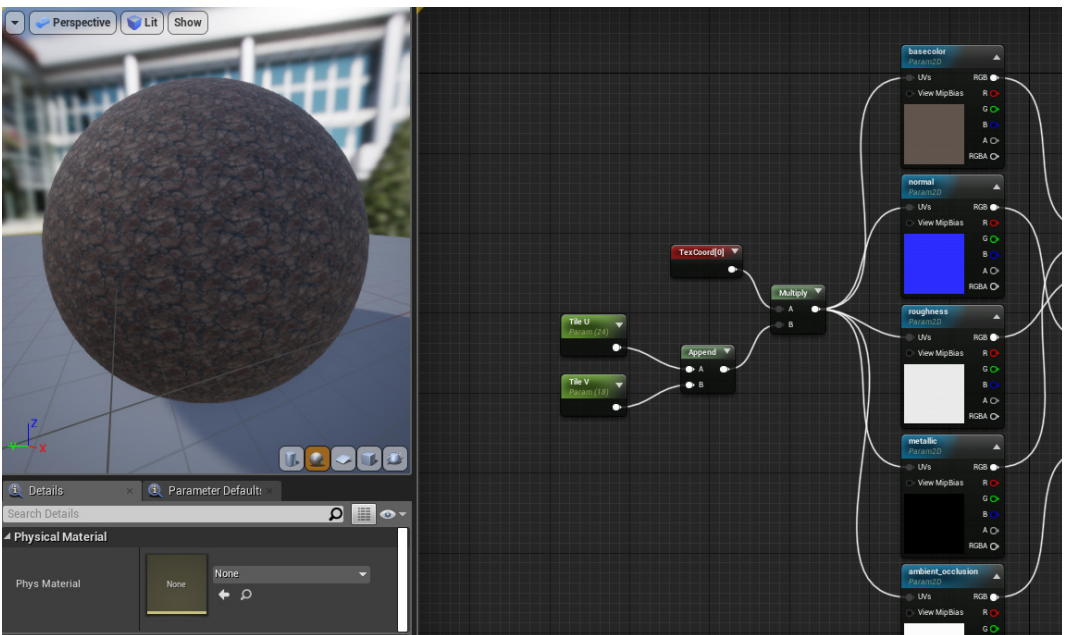
Cracked ground material downloaded from Substance Share, used for the floor
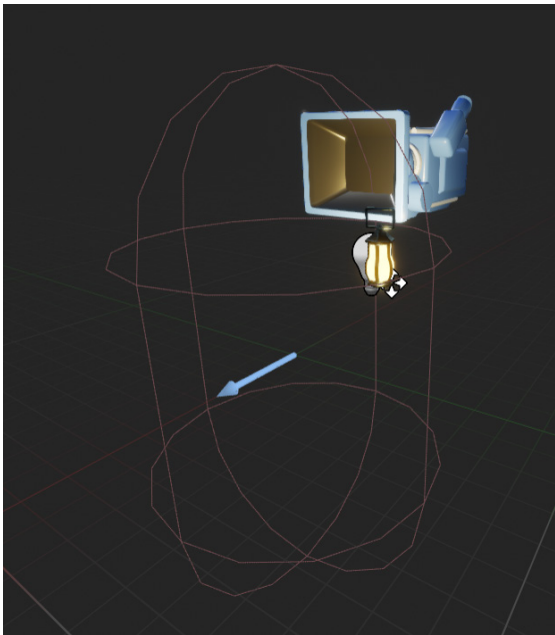
Screenshot of the beta build of the game, showing the improved cave wall meshes and lighting

Beta Build

The original cave wall stuck out as artificial, and didn't give the desired effect. This lead to the original mesh being heavily modified to look more organic, and a new material from Substance Share was added. The new cave wall meshes also required the layout to be slightly modified, but this resulted in an improved layout that felt less empty.

More functionality was added as well, with the player being able to collect gemstones that would flip a boolean that would later activate the portal to end the experience.

The cave was completely enclosed, and was pitch black without the lanterns affixed to the wooden support beams. This lead to incorporating horror elements. Giving the player a lantern or light source is a common tool in horror games to aid in increasing tension. In this experience, it was to create mystery, and to make the player feel that they were in a much larger space than they actually were.

Adding the lantern to the first person character blueprint
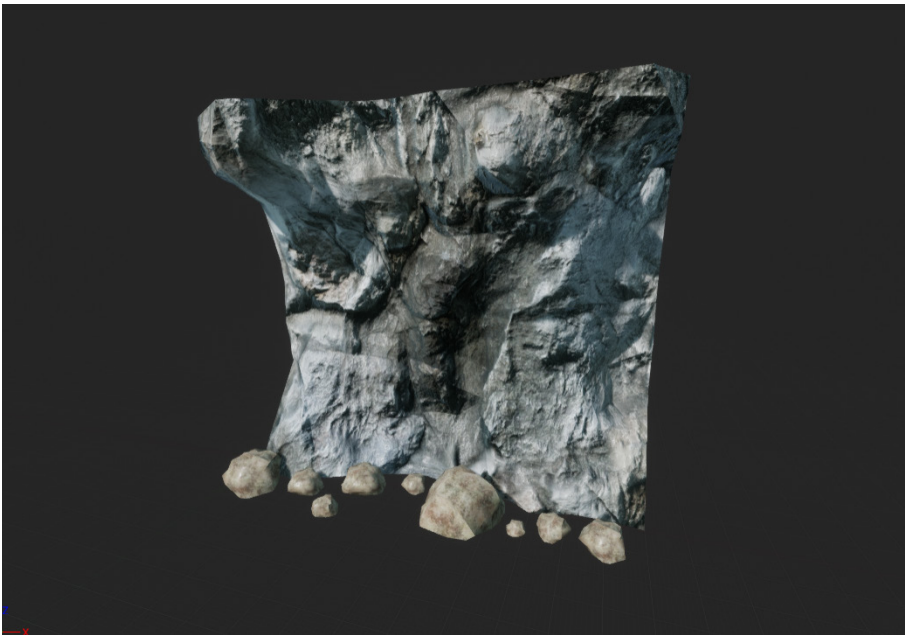
Cave wall mesh paired with scattered rocks at ground level to break up the transition from floor to wall
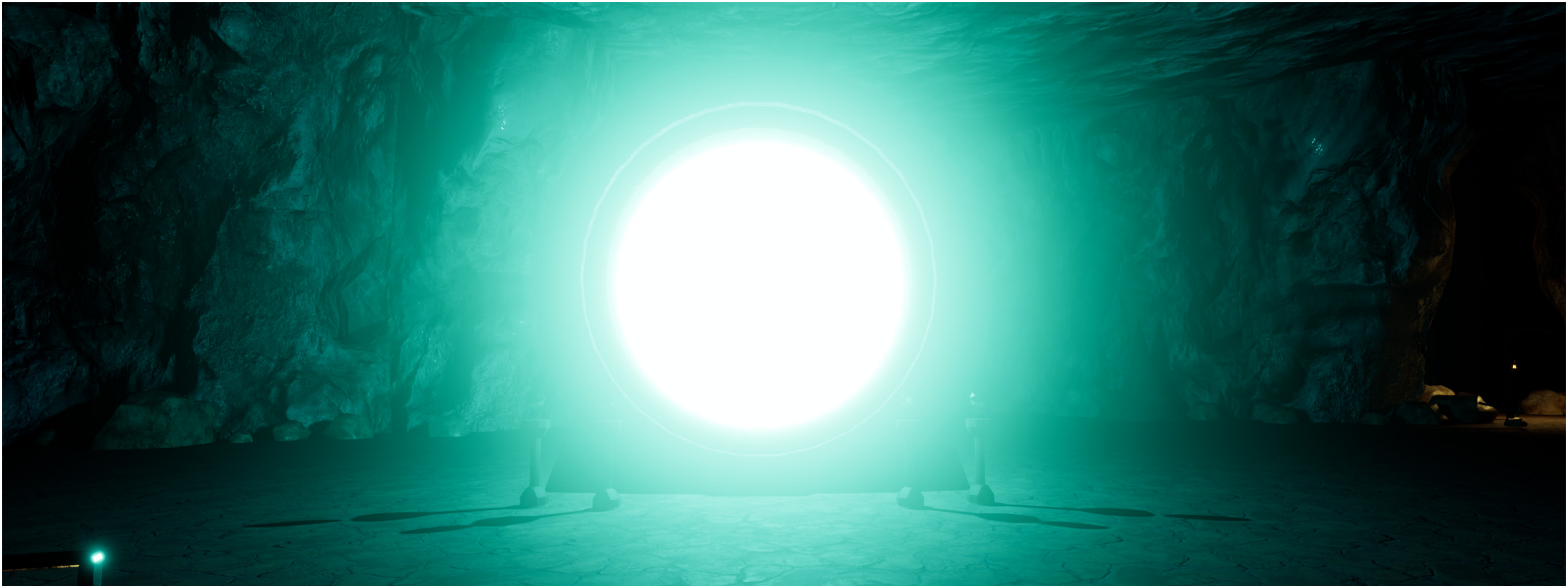
Screenshot of the final build of the game, showing the intense portal light after being activated
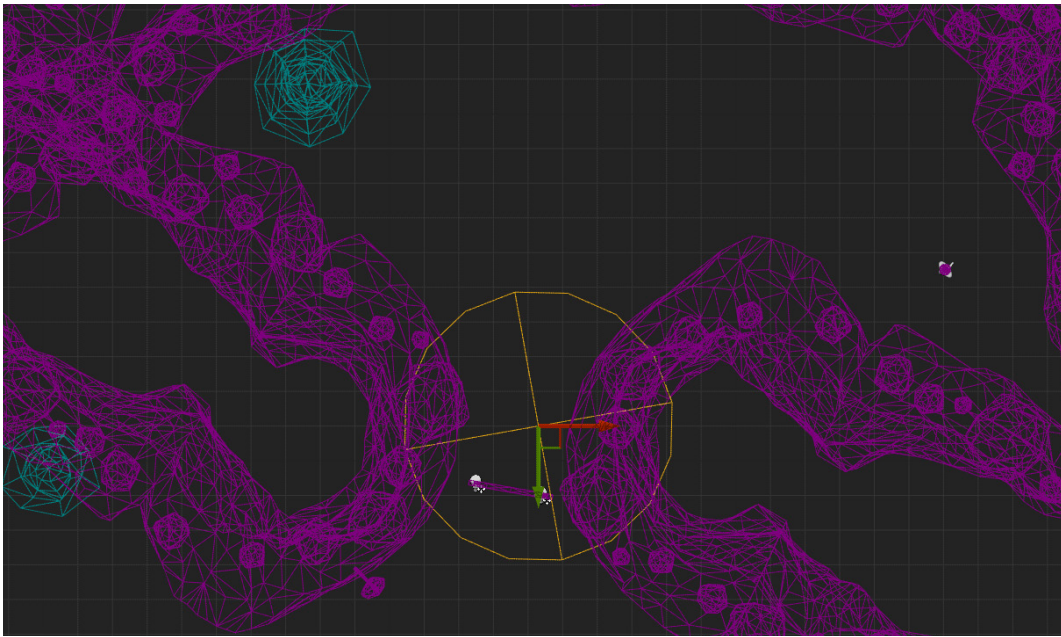
Final Build

In the final build, the last bit interactivity was added, along with sound design.

The interactivity refined the collection of gemstones and the activation of the portal. The gemstones would now appear in front of the portal on the pedestals that were originally empty, showing that the player has made progress. Upon collecting a gemstone, a quick trill sound plays to let the player know that they did something good.

Once all four of the gemstones have been collected, the portal activates. The portal surface has a heavy emissive attached to it, along with a light source. The surface is tilted slightly and rotated in a looping animation to make the surface appear to move despite its brightness.
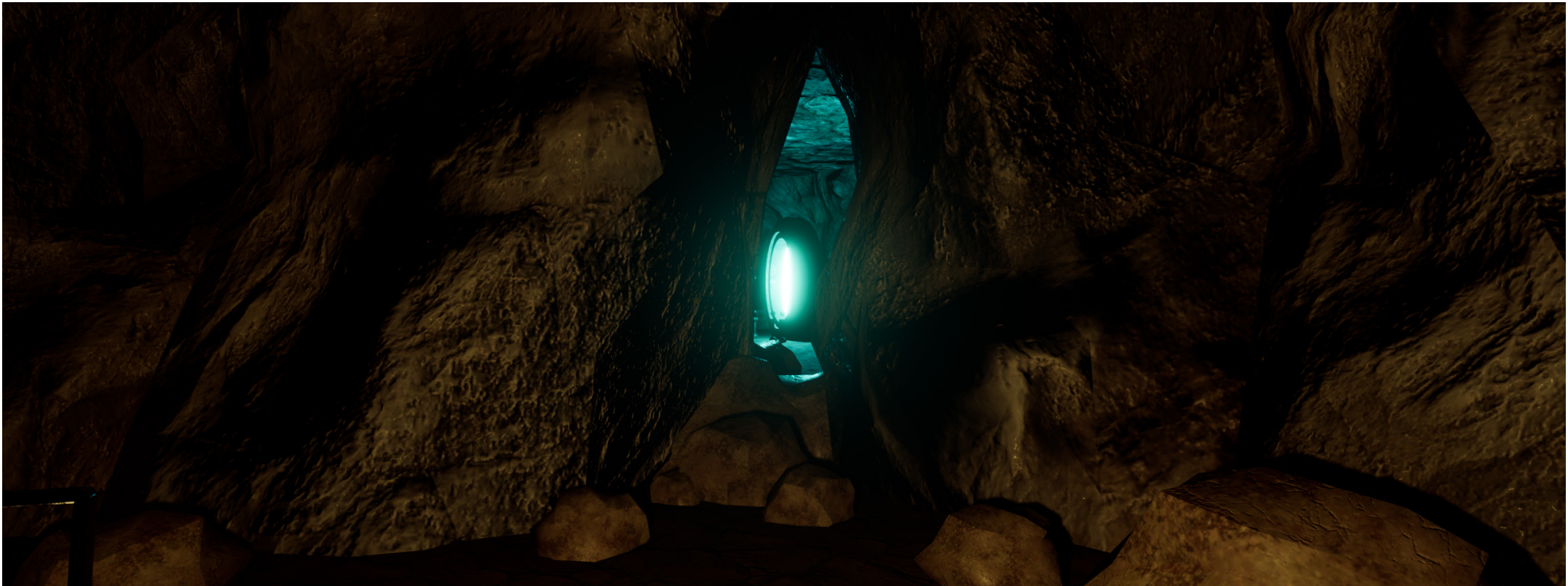
Sound design was a large factor in this step. A sound trigger blueprint was created that would play a sound in the distance when the player walked into the collision trigger sphere. There are five total sound triggers in the experience, along with the ambient cave noise and portal sounds.

*Sound trigger shown in level layout*
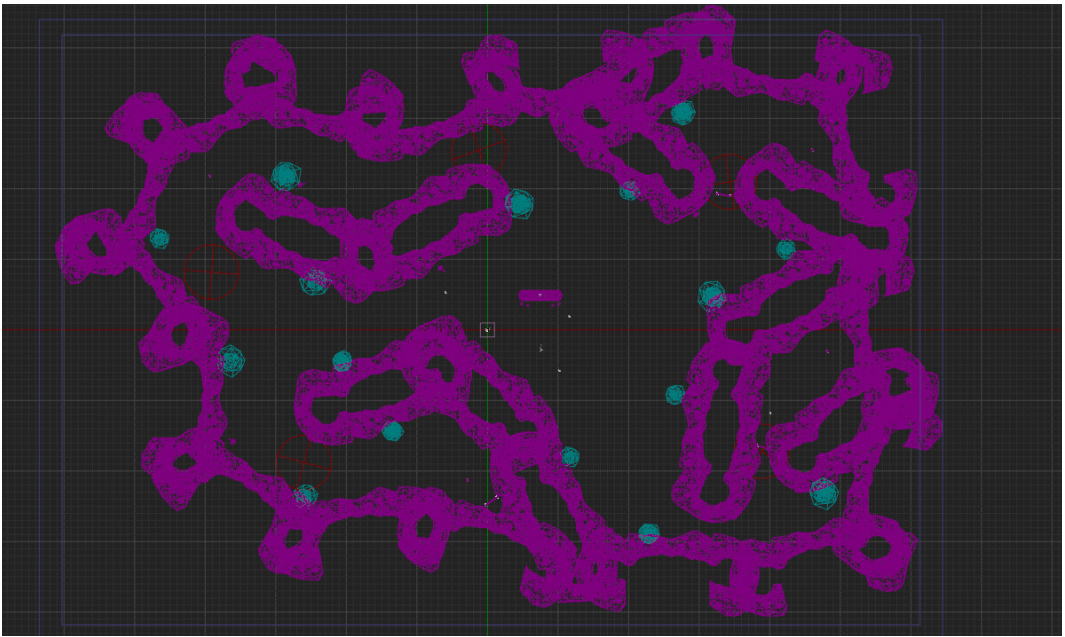
Layout of the final build

Viewing the active portal through a gap in the wall after collecting the last gemstone

Lighting Details

Lighting was relied on to guide the player to the different areas in the game. When the payer first starts, they are staring at a dark portal with no gemstone on the empty pedestals. There is light off to their right side in front of them, so this guides the player to discover their first gemstone.

Once they have braved the darkness and collected the final gemstone, the light from the portal activating is strong enough to guide them back to the center out of curiosity. The cool blue color contrasting with the warm lighting of the rest of the experience helps it stand out as unique and even otherworldly.
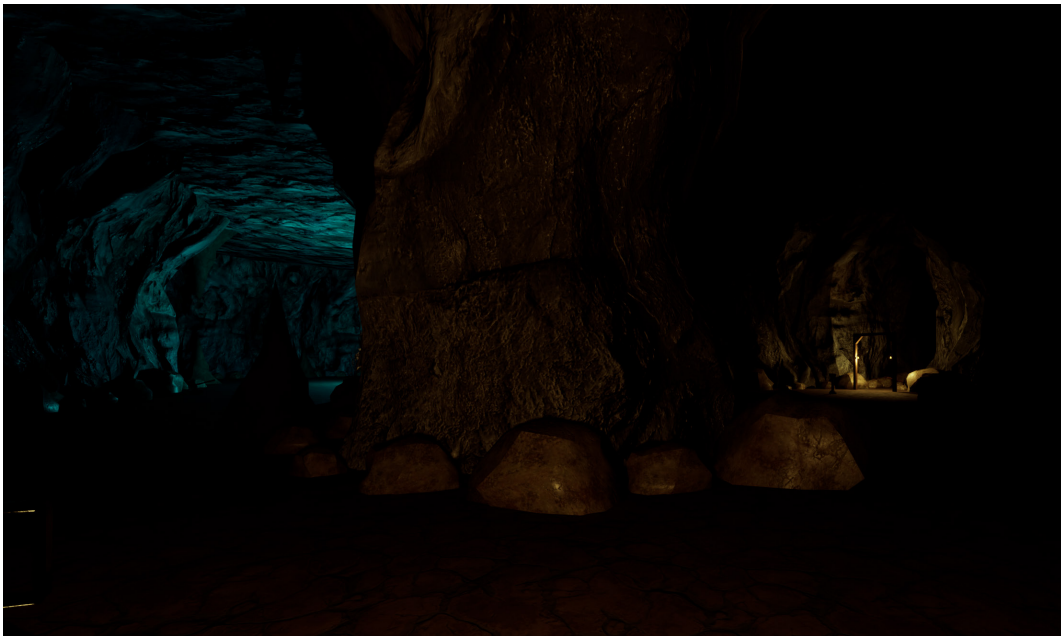
Portal lighting used to guide the player back to the center of the level

Start of the experience, staring at the inactive portal with four empty pedestals
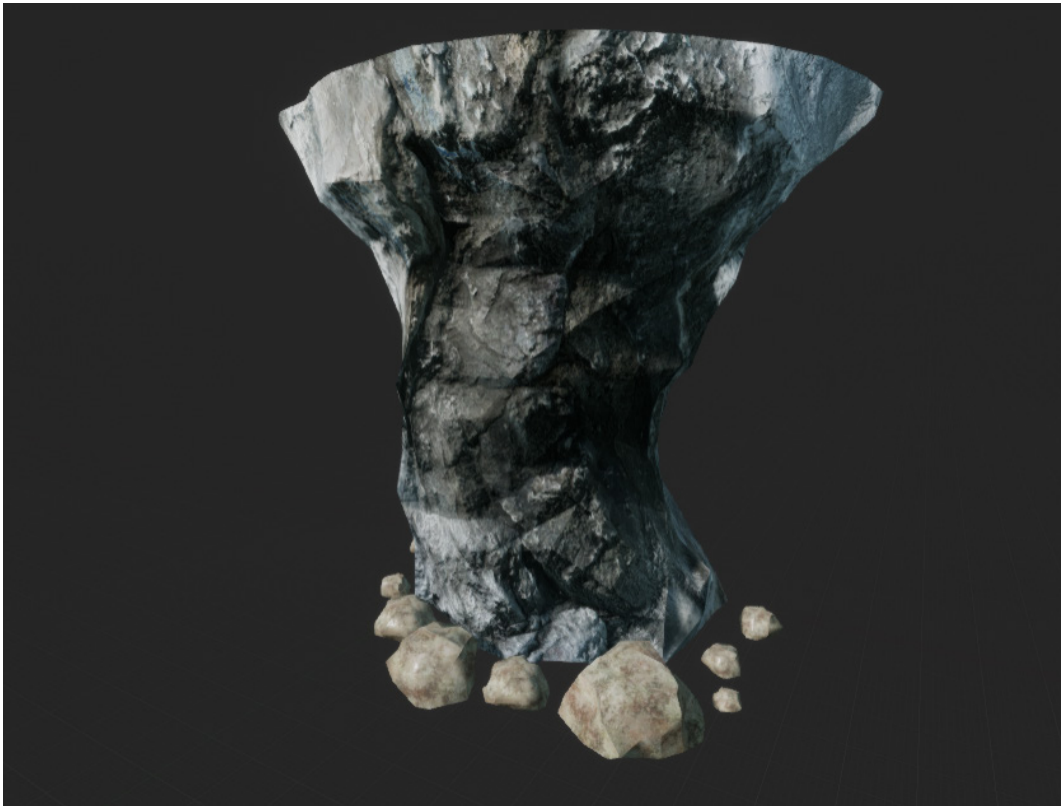
*Cave wall endcap mesh paired with rock details in blueprint*

*Pickaxe mesh using material created in Substance Painter*

Meshes

The final build of the game had relatively few meshes, as the emphasis of the project wasn't to create lots of high-fidelity meshes, but to rely on a few that were well crafted and aided the goal of the experience.
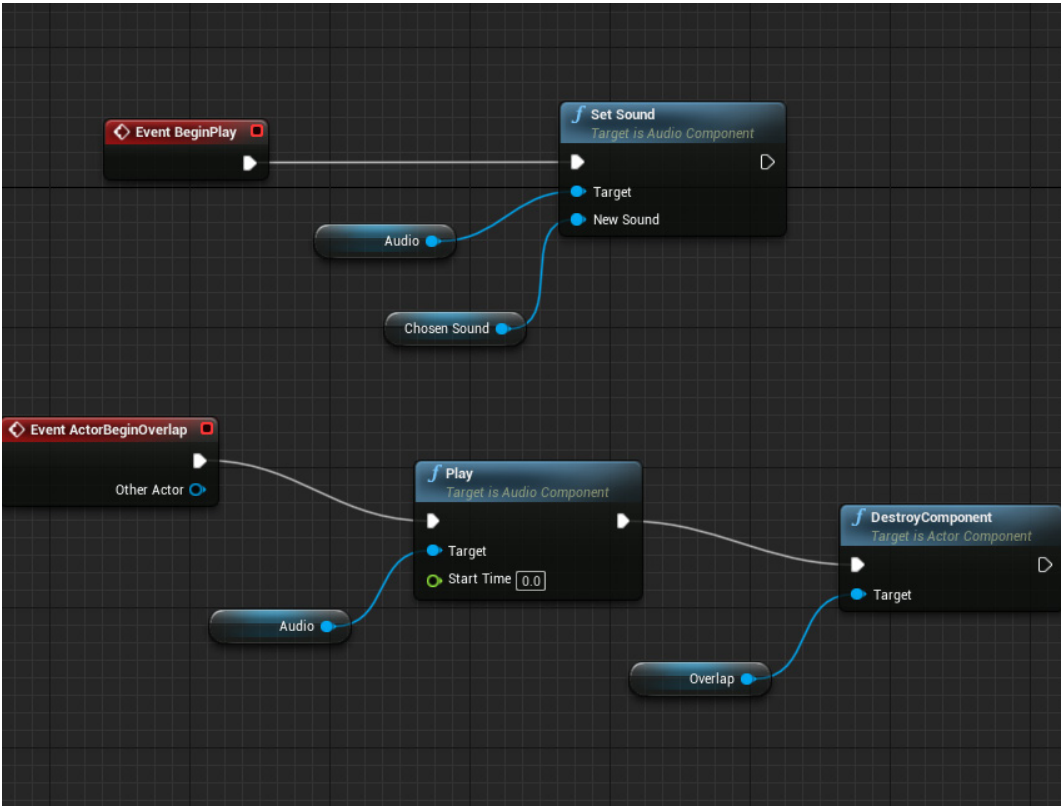
The cave walls, rocks, support beams, pickaxe, and lantern had to be revisited after the switch from VR development.
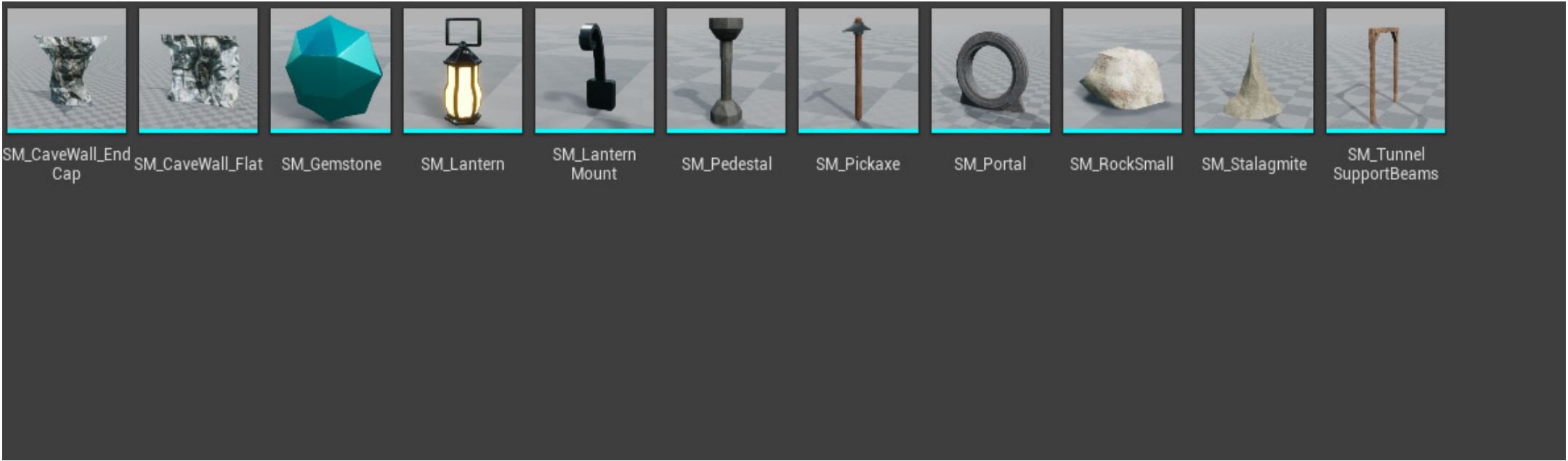
All meshes used, heavy emphasis on reuse and modularity
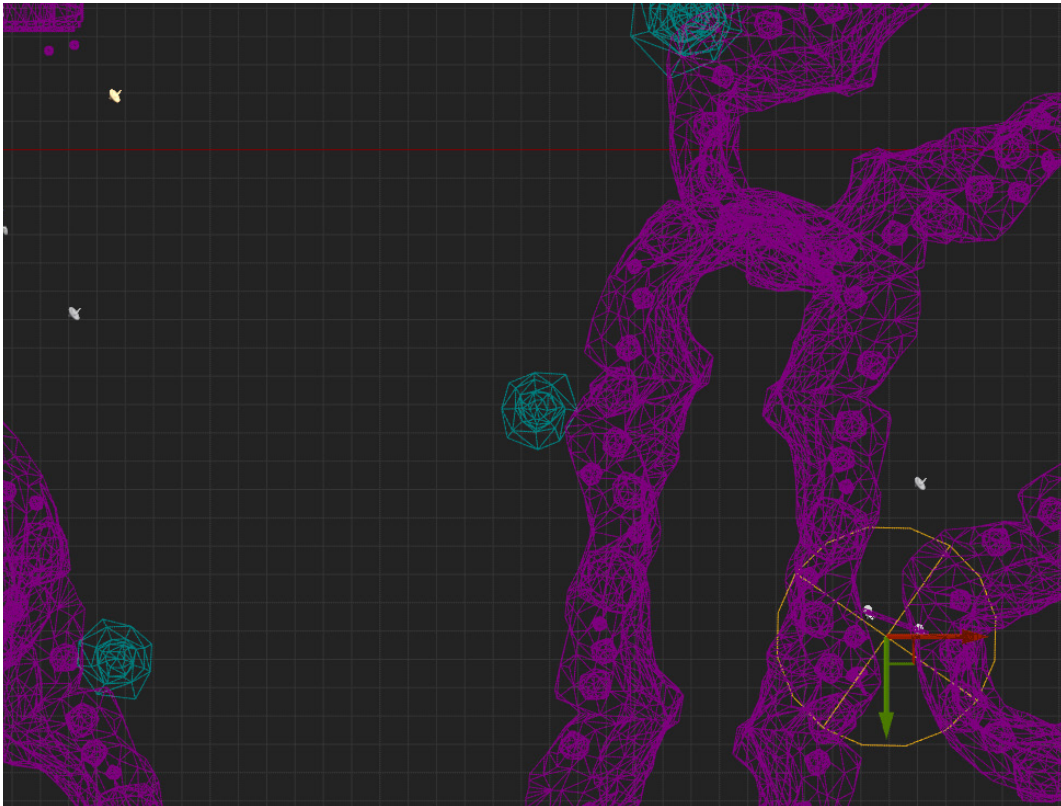
Audio trigger example showing the sphere collider on the bottom right, and the audio source in the upper left

Audio trigger blueprint that can be reused by switching out the chosen sound

Audio

While sound effects were introduced late in the process, they were always intended to be introduced. The chosen sounds emphasized the light horror environment, and helped with immersing the player in the cave environment.
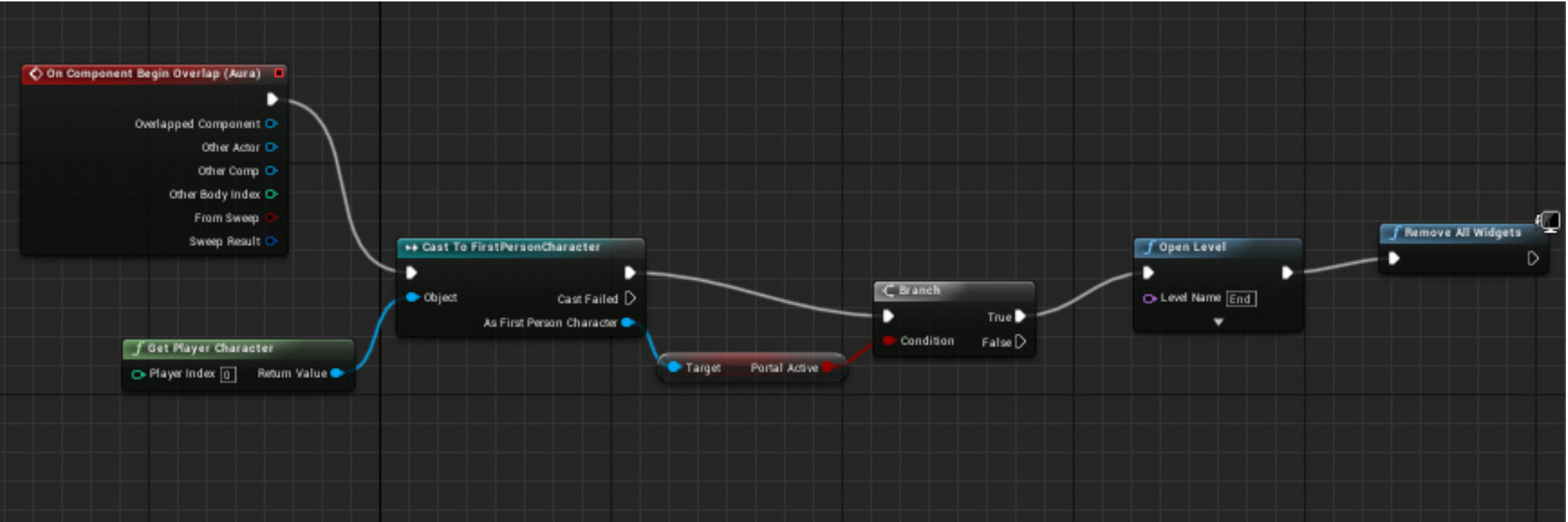

All audio cues used

All textures used in materials

Materials and Textures
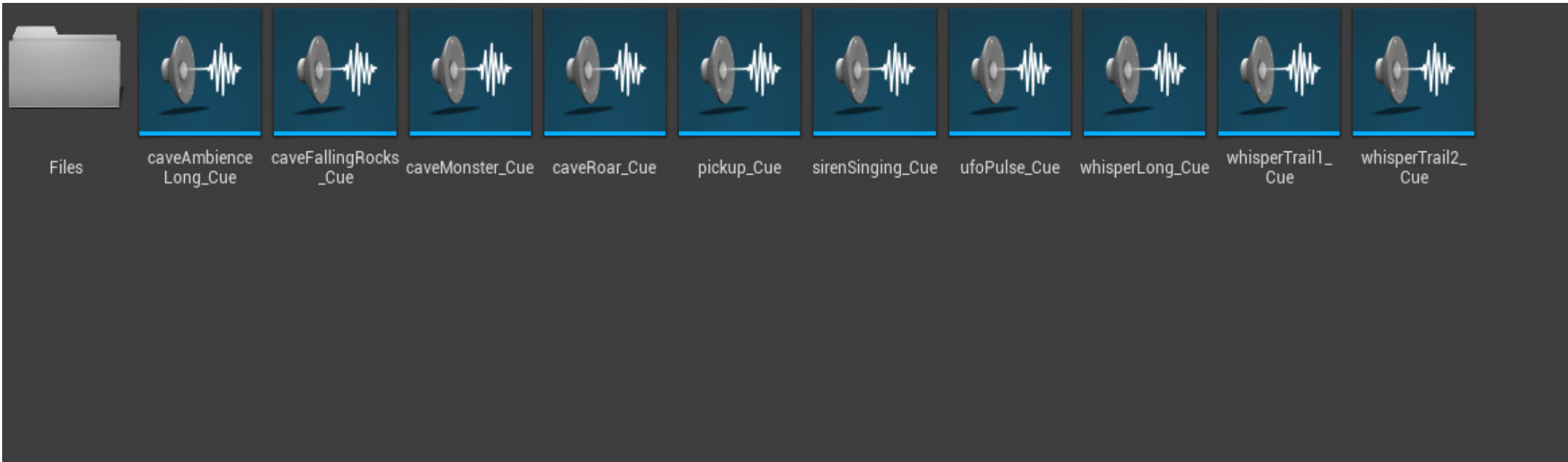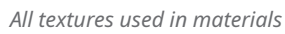
The desire was to have them appear somewhat realistic, but not photorealism. Materials that would be immediately recognizable.

All materials used

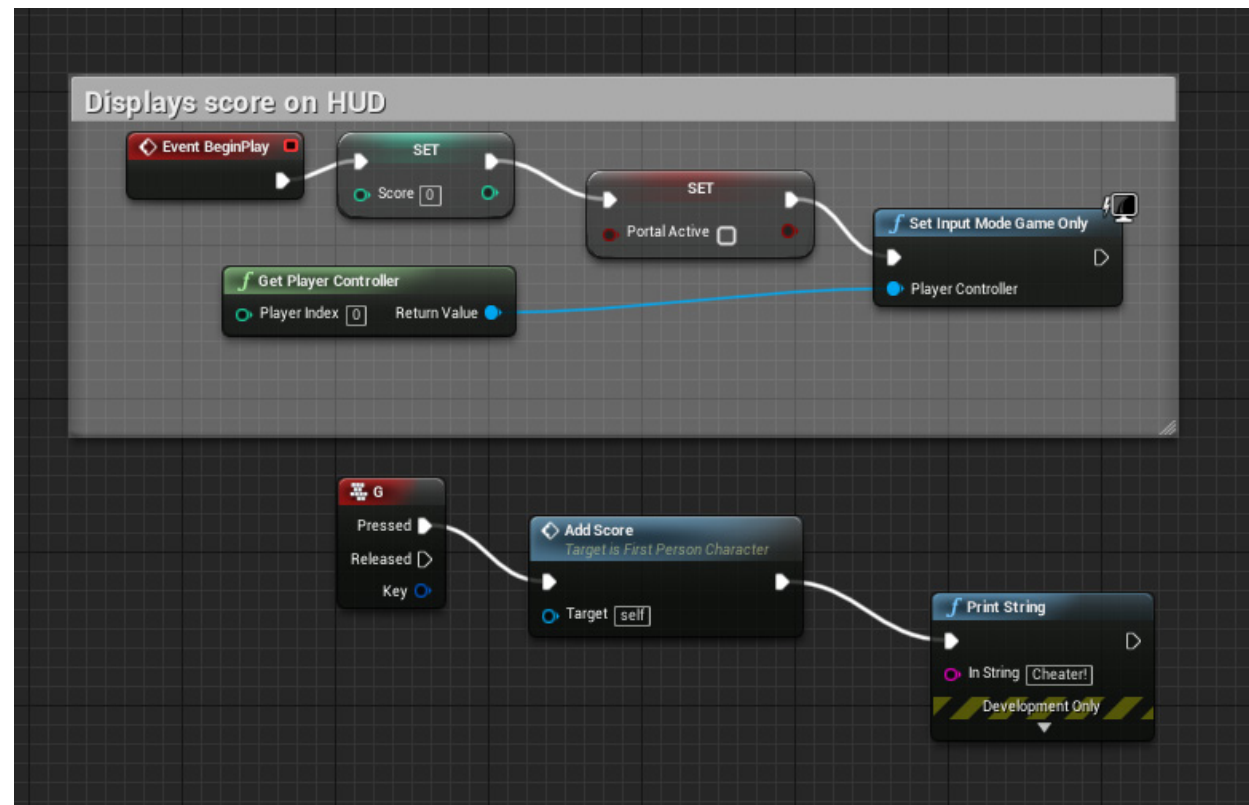*Portal blueprint that sends the player to the end screen when they touch it*

Portal Blueprints

The portal is a key part of the experience, so much of the functionality is tied to it. The portal allows the player to end the experience, along with triggering animations and various audio effects.
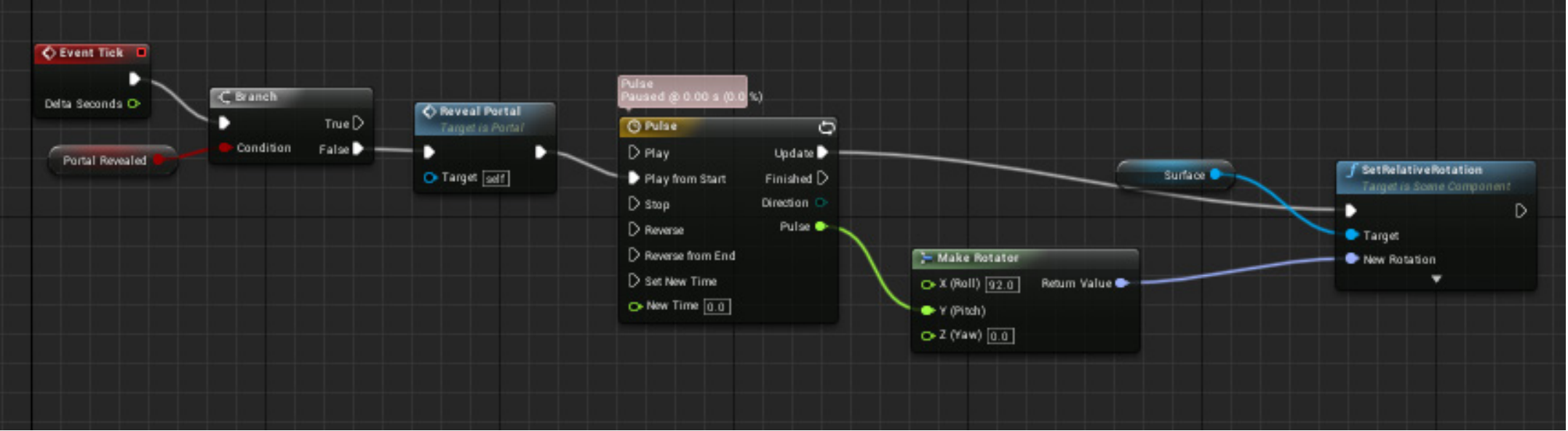
Blueprint that activates the portal when all gemstones are collected

Level blueprint that allows a cheat button, along with setting the varibles to their starting values

Player and Level Blueprints

The HUD and level blueprints also contain vital functionality. The HUD also is updated whenever a gemstone is collected.
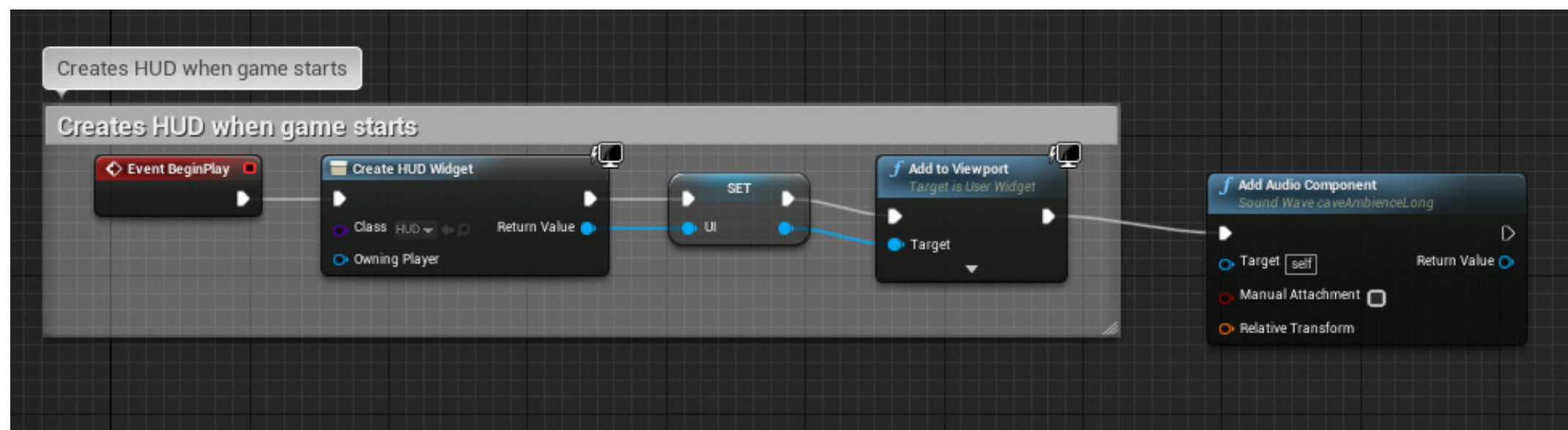
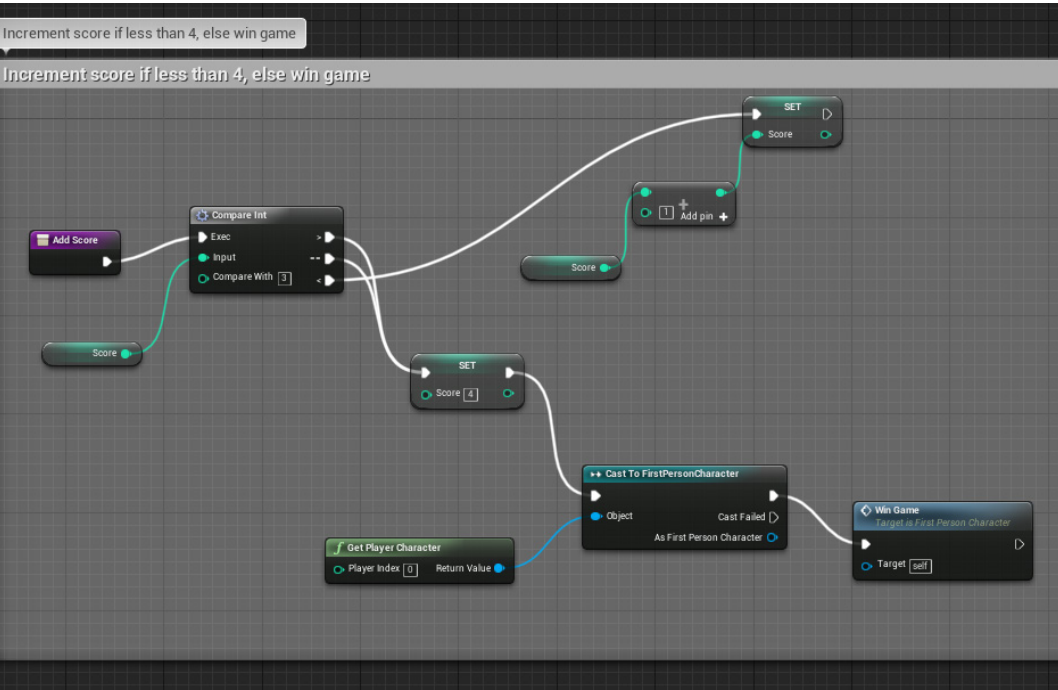*Player blueprint that creates the HUD and plays the ambient cave noises*

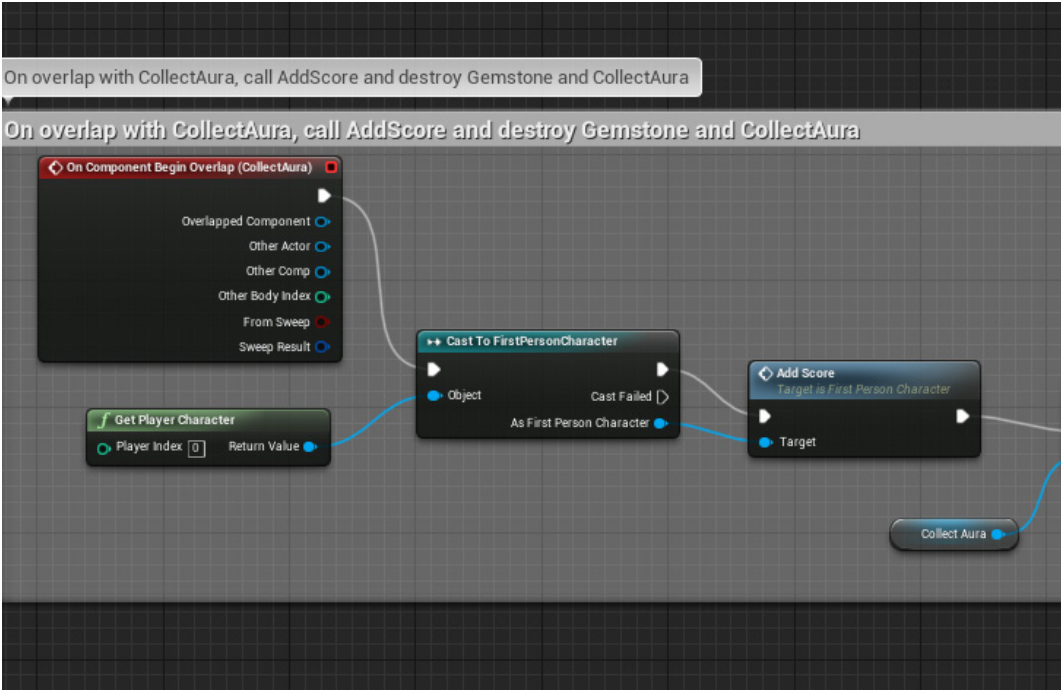*Title screen with the play button being hovered over*
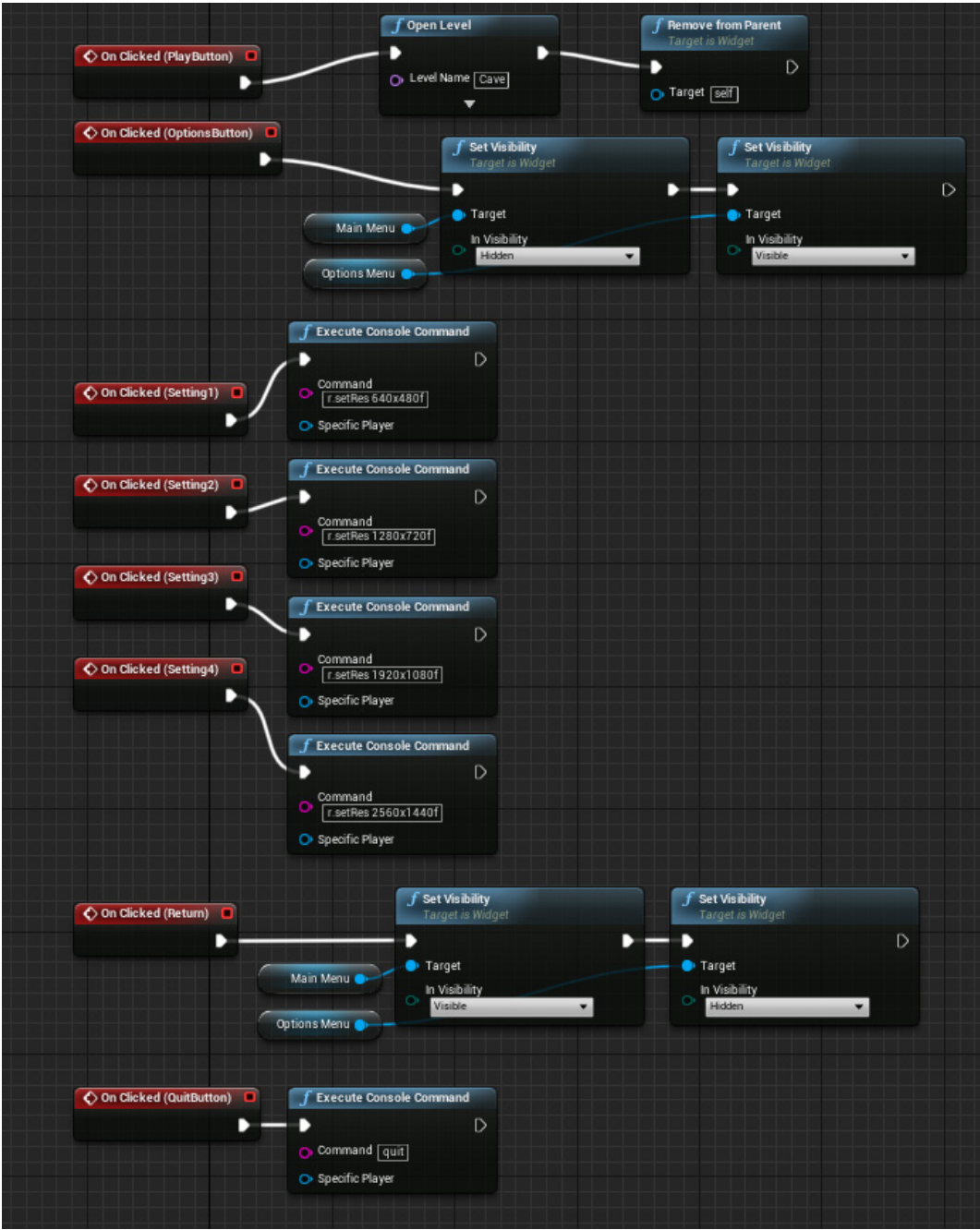
Title screen blueprint

Title Screen

The title screen had one of the largest blueprints, and allows the player to set resolution options, play, and quit the experience. The end screen uses an identical method.
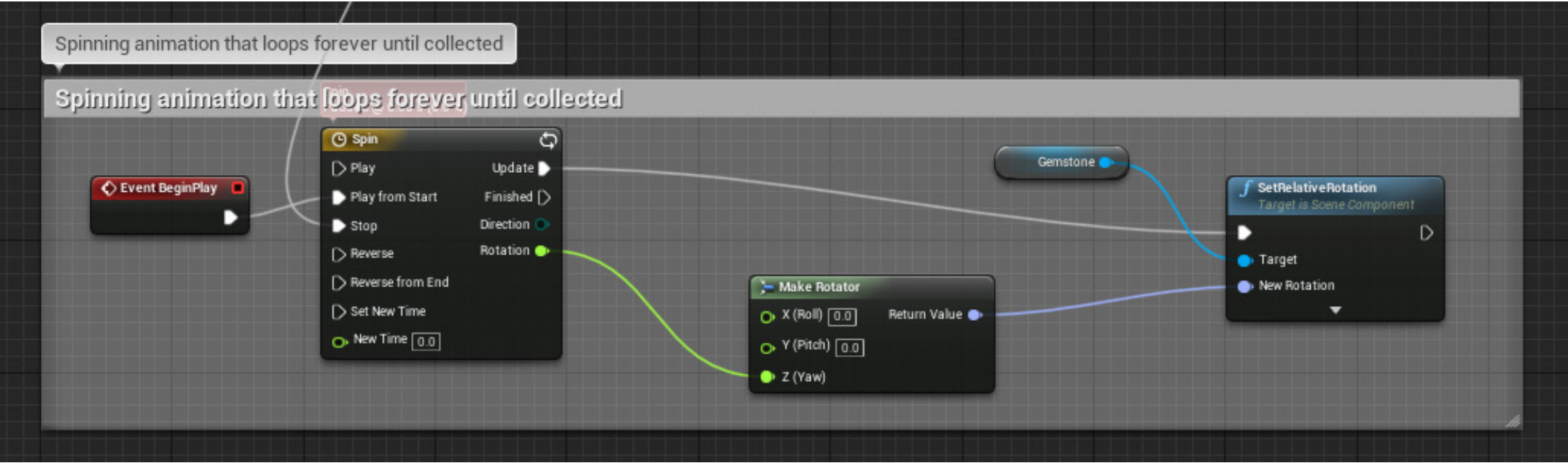
Blueprint that adds to the score

Calls the functions that adds to the score and destroys the gemstone

Gemstone and Score Blueprints

The score variable was tied to the player blueprint, so a function was added to the player that allowed it to be called whenever a gemstone was collected.
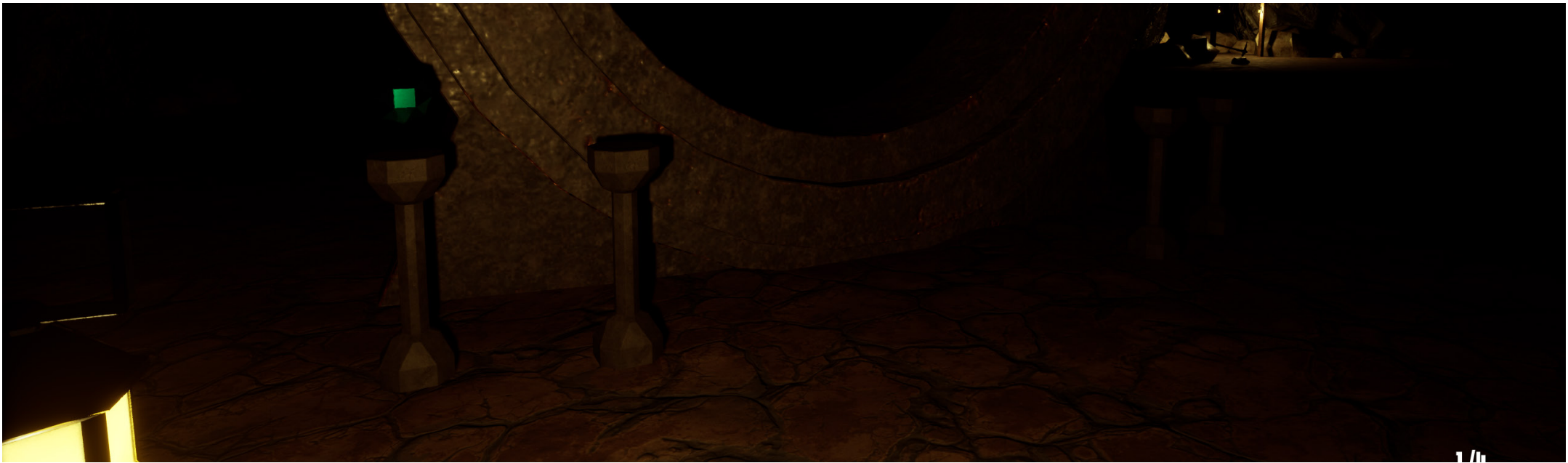

Causes the gemstone to spin

Gemstone about to be collected by player

Gemstone Player Feedback

Besides playing a lovely sound, if the player chooses to revisit the portal, they will observe their progress. This is meant as a bit of user feedback to let the player know that they are making progress towards their goal.
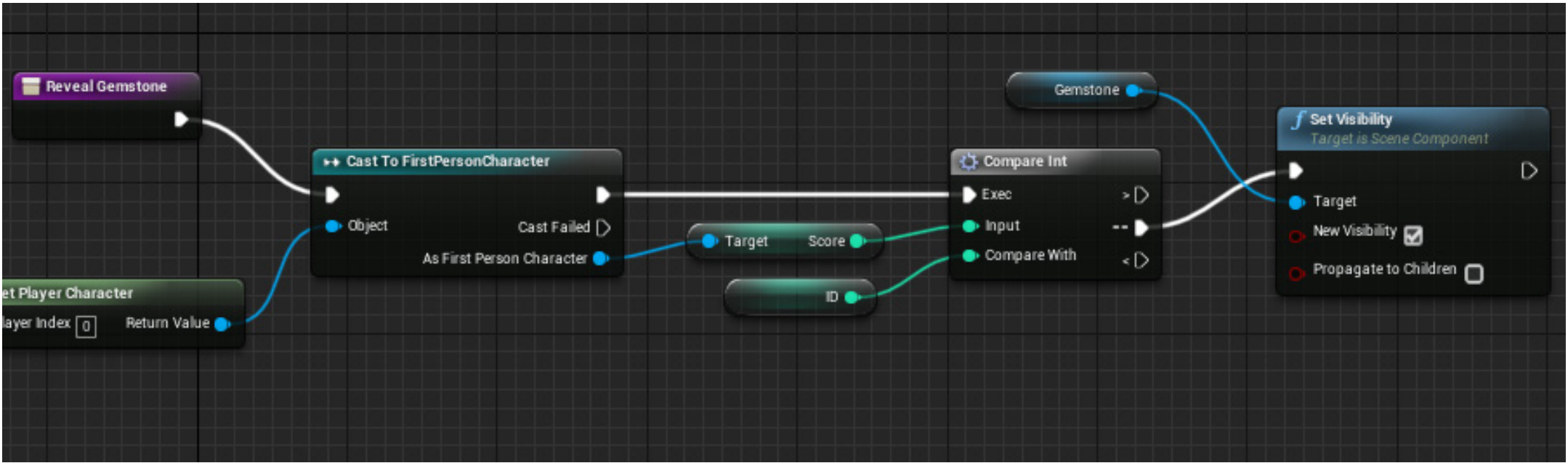

Gemstone appearing in front of portal after being collected, three pedestals remain empty
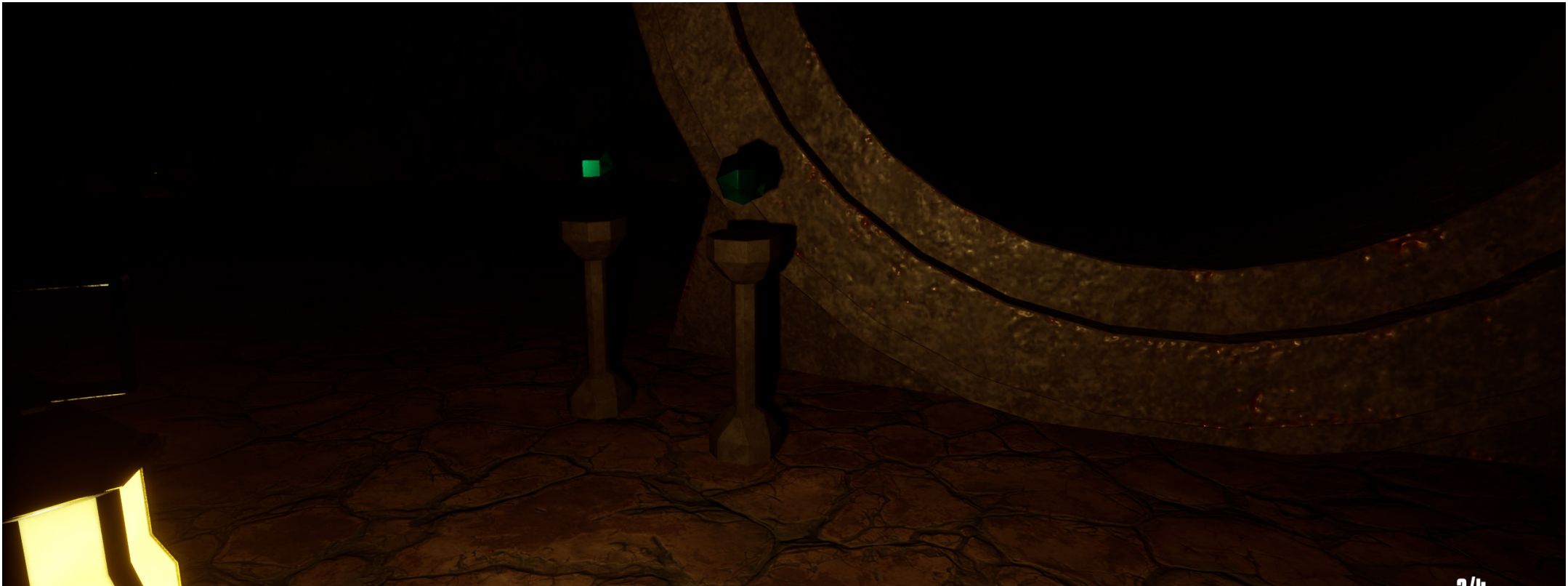
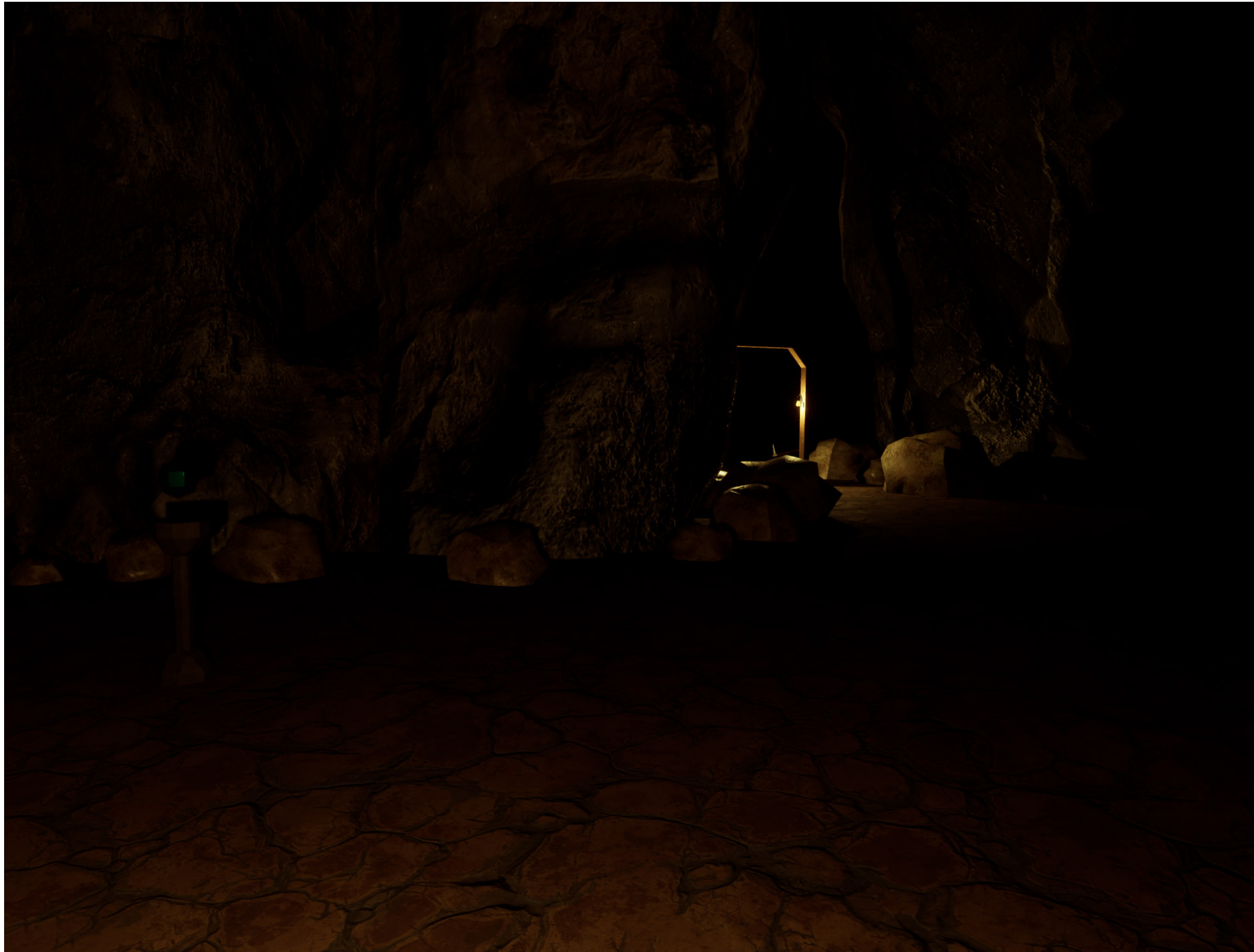*Gemstones appearing at portal*

Gemstone Pedestal Blueprints

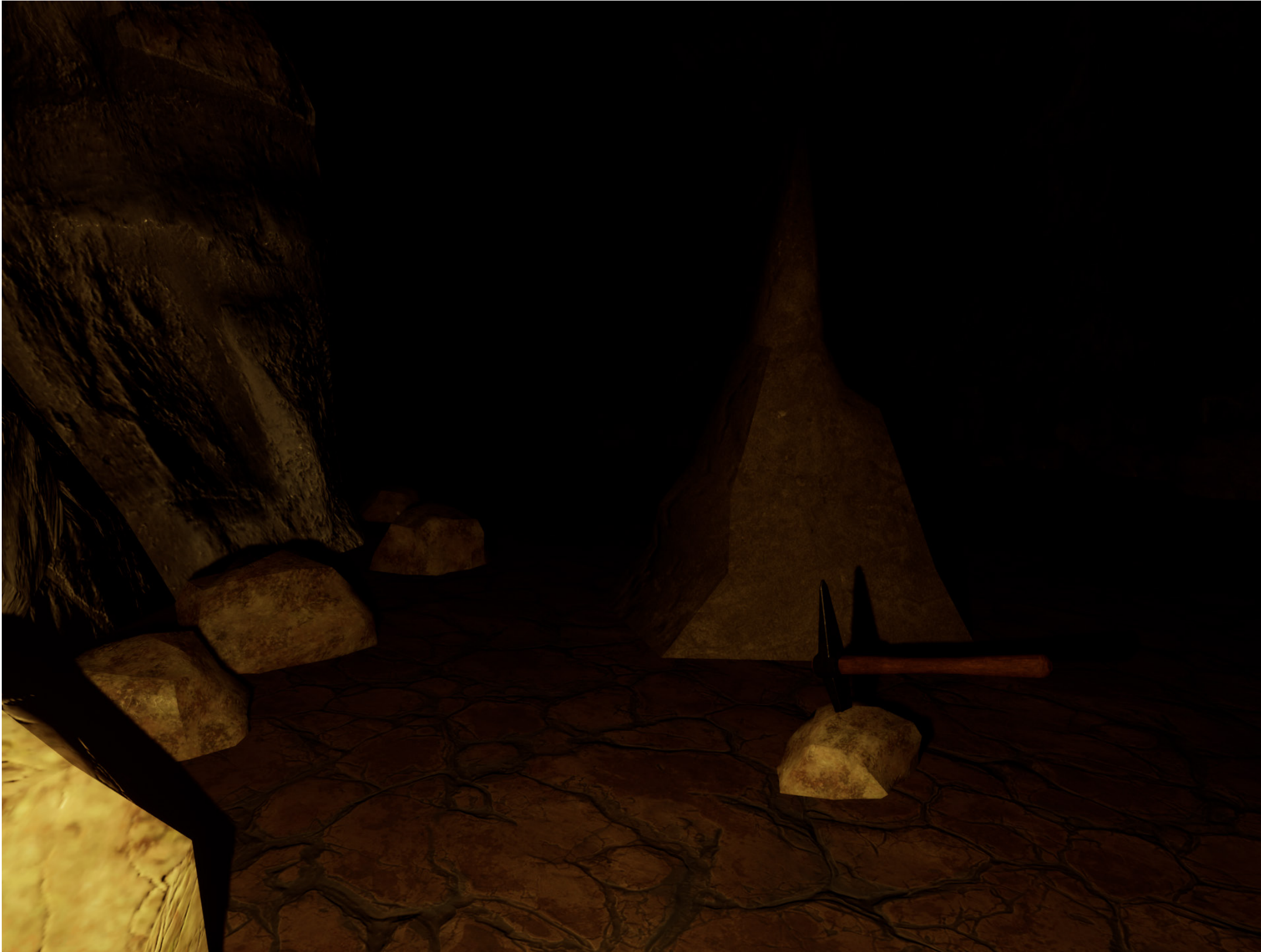This functionality was created using a function that could be called by other blueprints.

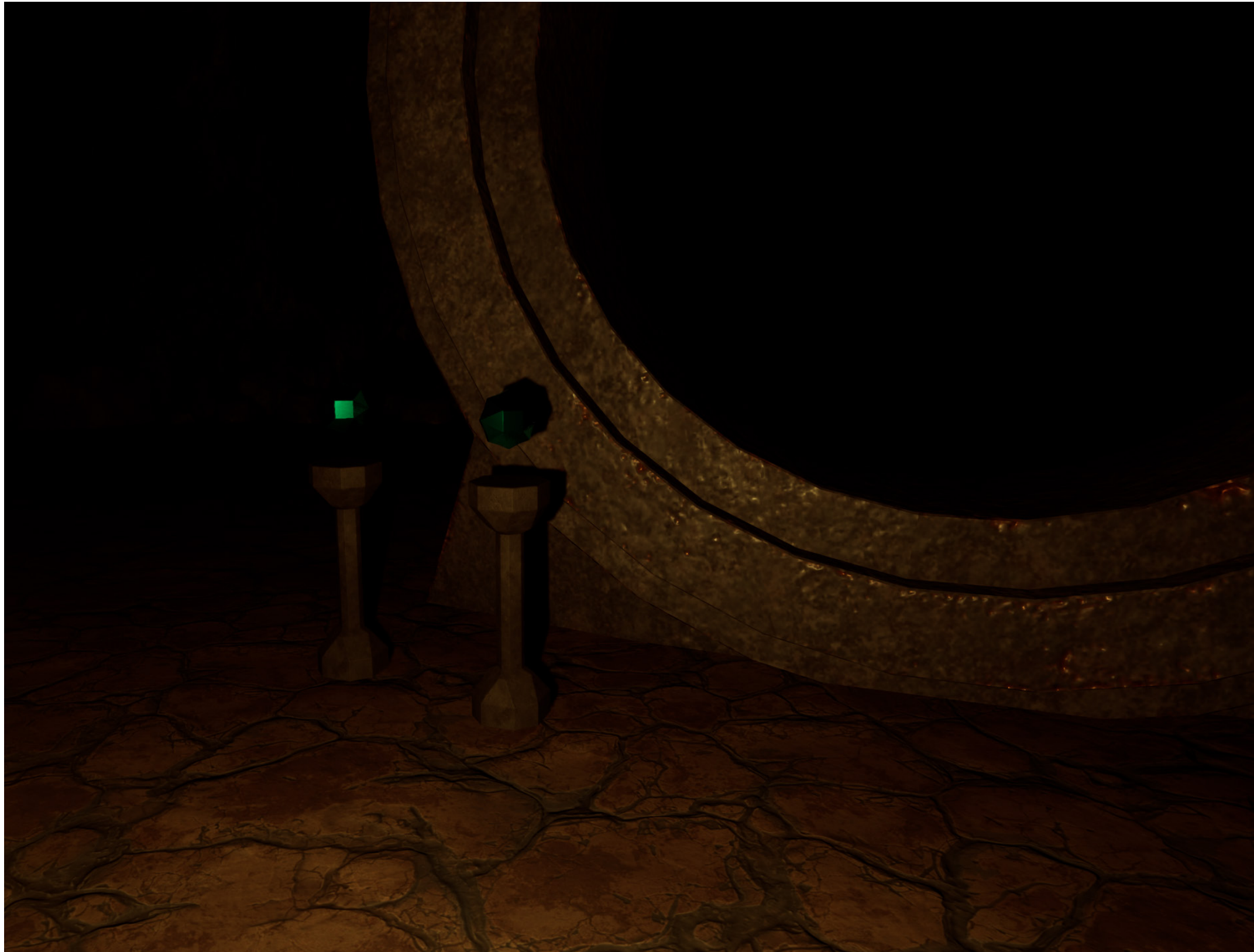*Blueprint for revealing the gemstone in front of portal*
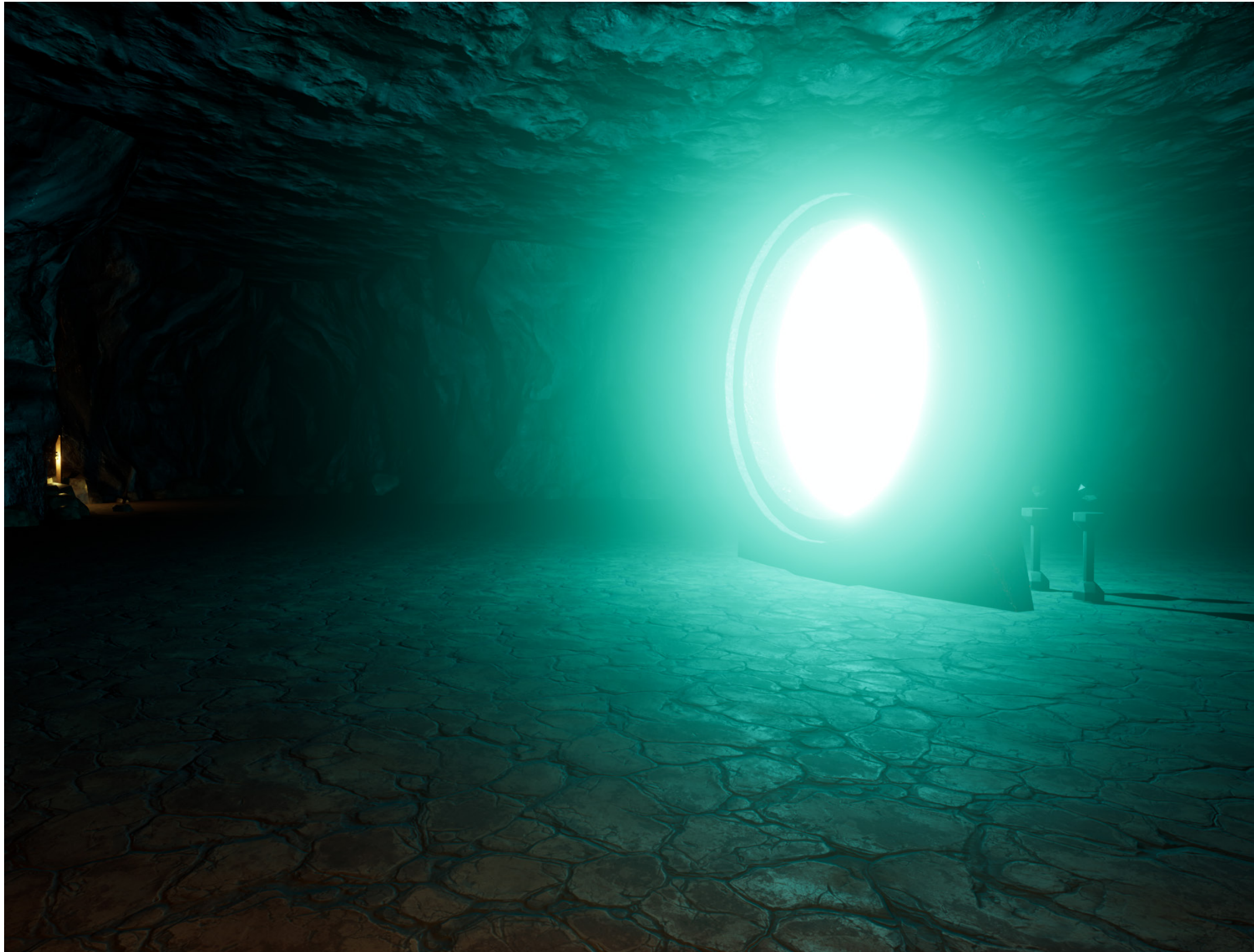
Additional Screenshots

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