



MORAVEIL:

A CRIPTIC QUEST

A Water Cooler Studios Game

Latest Update:

November 25th, 2023

Contents

1. Game Overview	5
1.1. Game Outline	5
1.2. Game Concept.....	5
1.3. Target Audience	6
1.4. Genres	6
1.5. Design Pillars	6
1.4.1. Fae Atmosphere	6
1.4.2. Highlighting History.....	6
1.4.3. Exploration and Escape	6
2. Mechanics	8
2.1. Physics	8
2.2. Controls	8
2.2.1. Movement.....	8
2.2.2. Actions	8
2.3. Challenges	8
2.3.1. Interactable Objects	9
2.3.2. Symbol Passcodes	11
2.3.3. Entities	11
2.3.4. Water.....	12
2.3.5. Stress.....	13
2.4. Screen Flow	14
2.4.1. Menus	14
2.4.2. Flow.....	16
2.4.2. HUD	17
2.5. Replaying.....	17
3. Level Design	18
3.1 Objectives.....	18
3.1.1 Player.....	18

3.2 Critical Path	18
3.3. Level Breakdown	18
3.4.1. Tutorial and Love Room	19
3.4.2. Present (Adventure)	20
3.4.3. Future (Escape)	20
4. Narrative.....	22
4.1. Riley Power.....	22
4.1.1. Backstory	22
4.1.2. Personality.....	22
4.1.3. Abilities.....	23
4.1.4. Relationship to Other Characters.....	23
4.2. Plot Elements	23
4.2.1. Setting Backstory.....	23
4.2.2. Disease Information	23
4.2.3. Story Summary.....	24
4.2.4. Polaroid Image	24
4.2.9. Ending	24
4.3. Non-Player Characters (NPC)	24
4.3.1. Caoimhe Power	24
4.3.2. Cu Chulainn	25
4.3.3. Entities	25
5. Audio	27
5.1. Audio Themes	27
5.1.1. Menu Soundtrack.....	27
5.1.2. Gameplay Soundtrack	27
5.1.3. SFX.....	28
6. Visuals	30
6.1. Aesthetic Themes.....	30
6.1.1. Moodboard	30

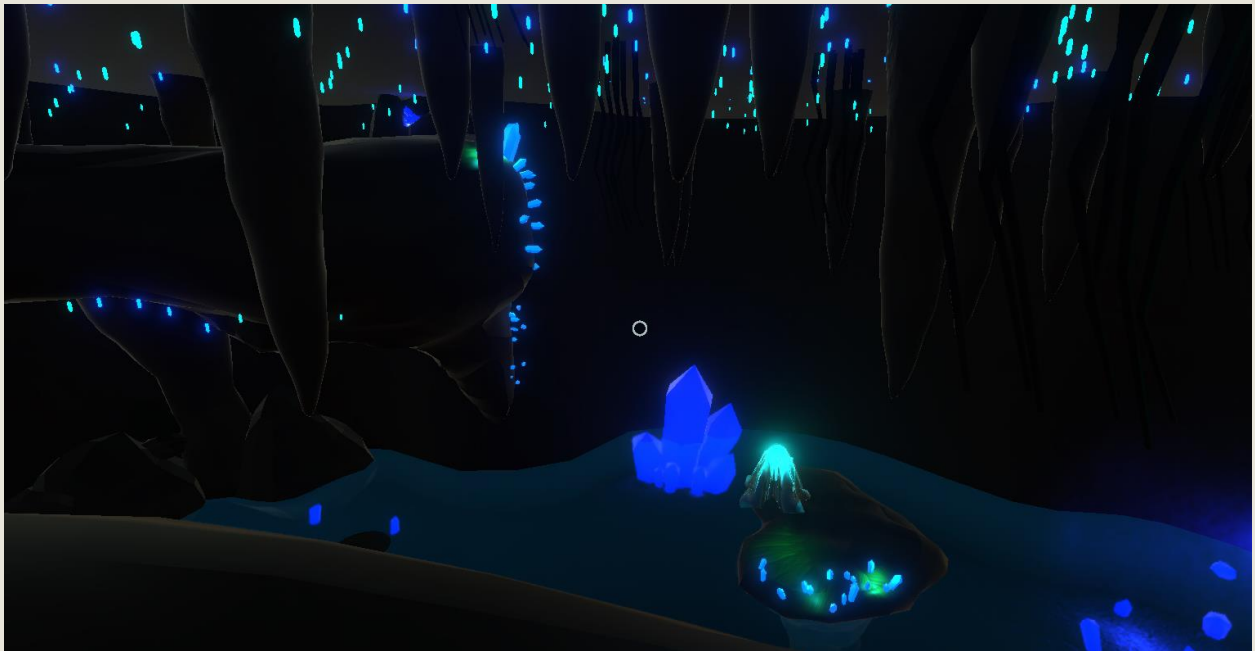
6.1.2. Ambiance	31
6.2. Graphic Style	34
6.2.1. 3D Assets	35
6.2.2. 2D Assets	35
7. Technical.....	36
7.1. Game Engine	36
7.2. Version Control.....	36
7.3. Programming Language:	36
7.4. Art and Audio Tools	36
7.5. Sound Tools	36
7.6. Game Requirements	36
7.7. Resources	36
7.7.1. Maya Modeling Tutorials	36
7.7.2. Substance Painter Resources	36
7.7.3. Audio Mixing Reaper.....	37
7.7.4. Recording	37
7.7.5. Audio Mixing FL.....	37
7.7.6. FI 20 Recording.....	37
7.7.7. Audio Mixing in Audacity	37
7.7.8. Audio in Unity	37
7.7.9 Video Editing	37
7.8 Naming Conventions	37
7.8.1. Folder Structure	38
7.8.2. Assets	38
7.8.3. Scripts.....	38
7.8.4. Game Objects.....	38
7.8.5. Methods.....	38
7.8.6. Classes and Methods	38
7.8.7. Links:	39

7.9. File Requirements	40
7.9.1. 3D Models	40
7.9.2. Sound	40
7.9.3. Images	40
7.10. Quality Assurance	40
7.10.1. Functional Testing	40
7.10.2. Regression Testing	40
7.10.3. UAT (User Acceptance Testing)	40
8. Production	43
8.1. Gant Chart	43
8.2. Policies	44
8.2.1. Absences and Late Arrivals	44
8.2.2. Submissions	44
8.2.3. Expectations	44
8.3. Credits	44

1. Game Overview

1.1. Game Outline

Moraveil: Cryptic Quest is a Celtic-inspired stealth cave exploration game. The player's main goal is to explore a cave. They are determined to find the [map to Moraveil](#), where the Fountain of Youth can be found, which [Riley Power](#) needs in order to cure the [disease](#) haunting his family. The player needs to go through many [challenges](#) while searching for the information hidden in the cave. In the process, the player will gradually learn about the story of [Cu Chulainn](#), an ancient hero of Ireland. The player must use their memory to solve puzzles that will let them find the map. After obtaining the map, the cave's magic fails, and it begins to collapse. While the cave is collapsing, the player must urgently return to the entrance of the cave to escape.

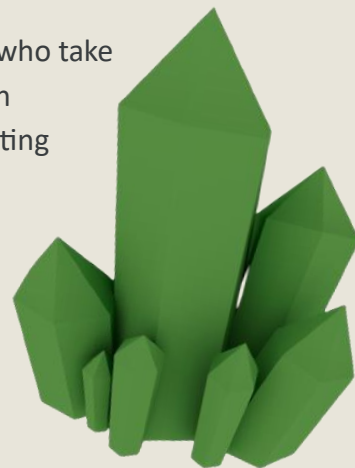


1.2. Game Concept

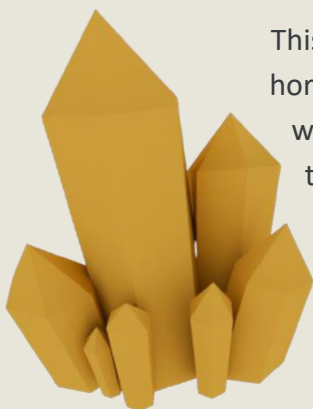
The player controls [Riley Power](#), an African-Irish archeology professor searching for the fountain of youth, which he needs to cure his family's hereditary disease. Riley must explore the watery caves of the Isle of Skye, find the [Tomb of Cu Chulainn](#), and escape, all while being hunted by the [Fae guardians](#) of the map to [Moraveil](#). If he has any hope of curing the disease that haunts his [family](#), he must brave the tomb and find his way to Moraveil's fountain of youth.

1.3. Target Audience

Our target audience for this video game is high school-age gamers who take an interest in history and have a fondness for Celtic mythology. With a Teen rating, the game appeals to this demographic's interests, offering a captivating blend of exploration, challenges, and fantasy set in a richly detailed world inspired by Celtic mythology. Whether they enjoy unraveling the mysteries of ancient civilizations or embarking on epic quests, this game is designed to provide an engaging and immersive experience for those who crave adventure and historical intrigue.



1.4. Genres



This video game is a captivating blend of the adventure, stealth, thriller, horror, and fantasy genres. Players embark on a suspenseful journey filled with heart-pounding stealth encounters, all set within a fantastical world teeming with eerie and horrifying elements. It combines the excitement of adventure with the tension of a thriller, immersing players in a spine-chilling and otherworldly experience that will keep them on the edge of their seats throughout the game.

1.5. Design Pillars

1.4.1. Fae Atmosphere

This game will curate a Fae atmosphere and experience. From whimsical to spooky, these trickster beings will dictate the overall feel and flow of this experience. This means we will explore lush caves while unearthing the untold [story of Cu Chulainn](#). Beware, for the [entities](#) lurking in the cave's shadows are not friendly.

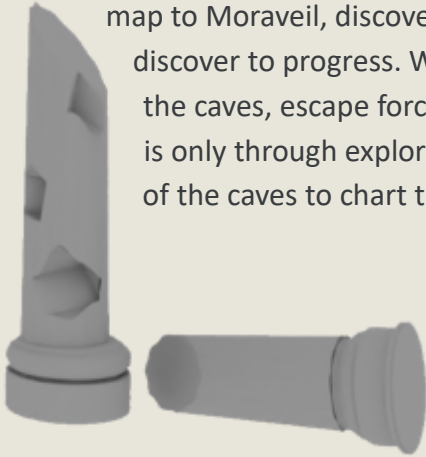
1.4.2. Highlighting History

While exploring this Fae atmosphere, history will force its way into the forefront of your adventure. Decipher the historical [murals](#) while trying to remember important [symbols](#) in order to keep progressing into the tomb. Don't let your guard down because escaping the cave will test your memory just as much as entering did.

1.4.3. Exploration and Escape



The player will be exploring the cave and the [tomb of Cu Chulainn](#) while looking for the map to Moraveil, discovering the secrets of the caves along the way, and using the things they discover to progress. Where exploration drives the player further into the watery depths of the caves, escape forces them outwards and upwards, reversing their journey. However, it is only through exploration that the player may escape, for they must use their knowledge of the caves to chart the fastest route out.



2. Mechanics

2.1. Physics

This game will follow real world physics; however, the player will be allowed to “double jump” to represent the character vaulting themselves up a ledge.

2.2. Controls

2.2.1. Movement

Mechanic	Key Bind
Look Around	Move with mouse
Walk Forward	W
Walk Left	A
Walk Backwards	S
Walk Right	D
Sprint	Left-Shift
Crouch	Ctrl
Jump	Space
Double Jump	Space x2



2.2.2. Actions

Mechanic	Key Bind
Interact	Left Click
Light	Right Click
Pause	Esc

2.3. Challenges

2.3.1. Interactable Objects

2.3.1.1. Headlamp

When the player is traversing through the cave, the headlamp will be needed to illuminate the way. When hiding from [entities](#), the player must turn off their headlamp so that the entity does not see/chase them. To turn on/off the headlamp, the player must press the [“Light” key](#).

If the player is being pursued by an entity, turning off their headlamp will cause the entity to lose sight of you and return to their path after some time has passed.

Additionally, the headlamp can be used to interact with the murals, lighting them up and revealing both the content of the murals, and the symbols hidden within. [Crystals](#) will also start to glow throughout the environment when the headlamp shines on them. These crystals will continue to glow for an extended amount of time, showing the player they [path](#) they took.

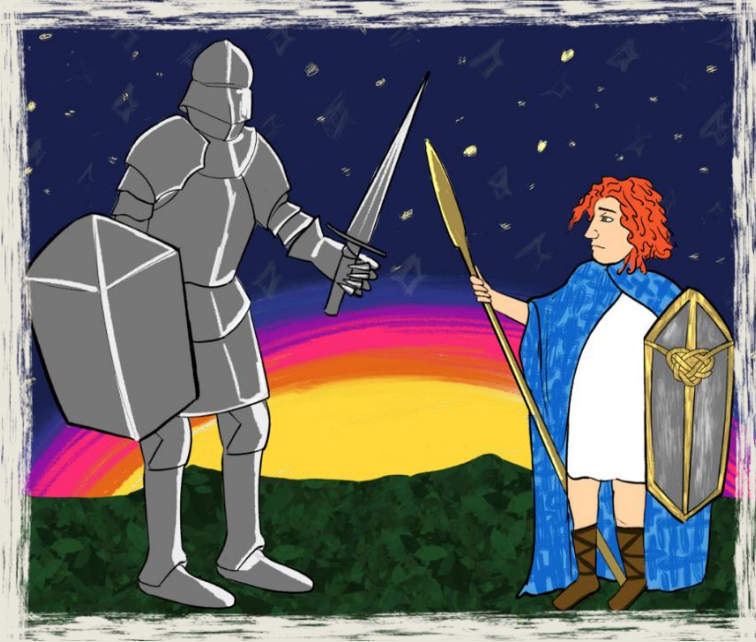
2.3.1.2. Murals

As the player explores the caves, they will find murals on walls in each section of the cave. The player will press the [“Interact” button](#) to view the mural. A voice line will play. To stop looking at the mural, the player must press the “interact” key again. Each mural will have a [hidden symbol](#) in the drawing for the player to use on the [keypads](#) later.

2.3.1.2.1. Dog

The player will view it by pressing the “interact” key, and [Dialogue\(Mural\)\(15\)](#) will play. To stop viewing, the player will press the “interact” key again. [sfx \(Mural\)\(1\)](#) will be playing in the background.





2.3.1.2.2. Ferdiad

The player will view it by pressing the "interact" key, and [Dialogue\(Mural\)\(16\)](#) will play. To stop viewing, the player will press the "interact" key again. [sfx \(Mural\)\(2\)](#) will be playing in the background.

2.3.1.2.3. Elopement

The player will view it by pressing the "interact" key, and [Dialogue\(Mural\)\(17\)](#) will play. To stop viewing, the player will press the "interact" key again. [sfx \(Mural\)\(3\)](#) will be playing in the background.

2.3.1.2.4. Tam Lin

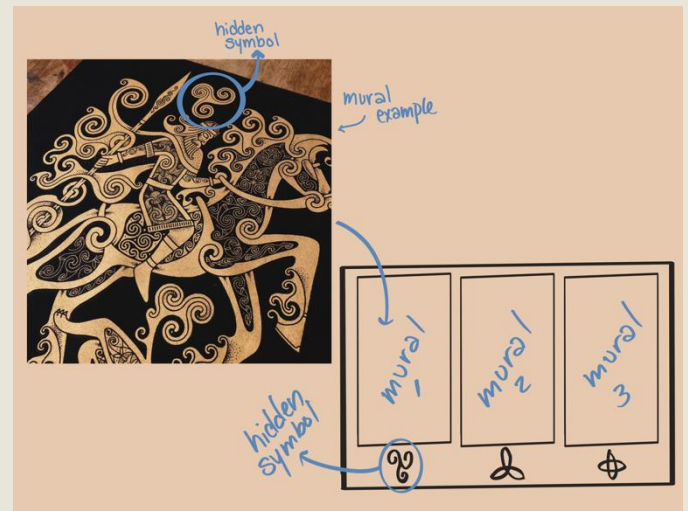
The player will view it by pressing the "interact" key, and [Dialogue\(Mural\)\(18\)](#) will play. To stop viewing, the player will press the "interact" key again. [sfx \(Mural\)\(4\)](#) will be playing in the background.

2.3.1.2.5. Death

The player will view it by pressing the "interact" key, and [Dialogue\(Mural\)\(19\)](#) will play. To stop viewing, the player will press the "interact" key again. [sfx \(Mural\)\(5\)](#) will be playing in the background.

2.3.1.3. Keypads

The keypads will be located on the right side of each door. To use the keypad, the player must press the "interact" key. On the keypad, the player will have to use the "interact" key to click each [mural](#) with its corresponding [symbol](#) in the correct order to unlock the door. Each symbol clicked will cause the sound effect [fx \(environmental\)\(KeypadTone\)](#) to play. Once completed successfully, sound effect [sfx \(environmental\)\(KeypadCorrect\)](#) will play and the player will press "interact" in order to stop looking at the keypad. Entering the wrong password will give the sound cue [sfx \(environmental\)\(KeypadIncorrect\)](#) to inform the player they have entered the wrong password and must re-enter the password to fix their mistake.



2.3.1.4. Journal

Near the entrance to the tomb, the player will find a journal. To view the Journal, the player will press the "interact" key.

[Dialogue\(Interactable\)\(22\)](#) will play. To stop looking at the polaroid, the player must press the "interact" key again.



2.3.1.5 Map

In the center of the tomb, the player will find a map. To pick up the map, the player will press the "interact" key. [Dialogue\(Interactable\)\(21\)](#) will play and the tomb will begin to collapse. This signifies the start of the ending and the player must try to escape the cave.

2.3.1.6 Polaroid

The player can look at the [polaroid image](#) they find in the game. This is achieved by pressing the ["interact" key](#). By pressing the "interact" key, the polaroid is brought up in front of the player, and [Dialogue\(Interactable\)\(20\)](#) plays. To stop looking at the polaroid, the player must press the "interact" key again.

2.3.1.7. Crystals

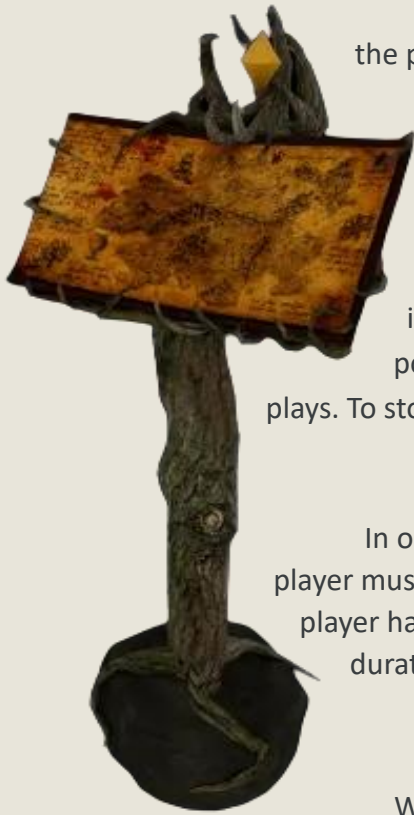
In order to illuminate the [path](#) that you've taken while exploring the cave, the player must gaze at crystals to make them glow. This interaction occurs when the player has their [headlamp](#) turned on and is looking at a crystal for around 1 second duration. The crystal light will stay on and will not turn off after activation.

2.3.2. Symbol Passcodes

While exploring the cave, the player must locate [murals](#) on the wall and examine the symbols that are hidden in each mural. In order to advance to the next room, they must use a [keypad](#) with the different murals they had just found and must interact with the correct mural in the correct order as listed by the Celtic knots below the keypad.

In the [first room](#), the player will discover two murals for their passcode, while in the [next room](#) they will discover three. Therefore, the first passcode is of two, while the second is of three and will give the player access to the map room.

2.3.3. Entities



While exploring the cave the player's constant evasion of Entities, radiant beings emanating light from their core. These fiery Entities harbour a profound aversion to water, as it naturally extinguishes them.

Direct contact with the Entities or their particle trail results in the player being stunned, and with no hiding spots available, evading these entities becomes paramount. While the Entities typically adhere to a predetermined path, the player's failure to turn off their [light](#) in proximity prompts them to deviate, pursuing the player off their set course. Chasing persists until the player turns off their light.

Entities, composed of fire, demonstrate an increased chasing speed compared to their walking pace on the set path. Remarkably, they cannot walk through solid objects but can leap onto them, mimicking the [player's abilities](#). Aggravating multiple Entities can lead to the simultaneous pursuit of the player.

These Entities generate sound effects reflective of their surroundings, yet these sounds morph into abstract clicks and screeches when in pursuit, serving as a distinctive language to convey their altered intent.



2.3.4. Water

When a player enters water in a game, their movement can be adjusted to mimic the realistic movements of water in real life. This can enhance immersion and create a more realistic gaming experience. One way to achieve this is by reducing the player's movement speed. When a player walks into water, their speed can be decreased to reflect the resistance of water, simulating the feeling of moving through water, which is typically slower than moving on land. This adjustment can help to create a more authentic and immersive experience for the player.



In addition to reducing movement speed, other aspects of movement can be altered when a player is in water. For example, their running or jumping ability can be limited or modified to reflect the different physics of water. Players may not be able to run as fast or jump as high or as far as they would on land. This change helps to simulate the reduced buoyancy and resistance of water, making the gameplay more realistic.

2.3.5. Stress

The player will have to manage their stress throughout the game by paying attention to the bar on the vignette on their screen. When the screen completely turns black the player will be stunned, essentially blacking out for a few seconds. From there, they will have to listen to a few voice lines before continuing exactly where they left off.

The Stress will increase based on the following factors:

- The player falls from a high place (anything more than two jumps off the ground)
- The player sprints for too long (5 seconds before meter increases)
- The player's proximity to [entities](#)
- The player double jumps too close together (5 seconds between jumps)

The Stress will decrease based on the following factors:

- The player stops moving entirely (5 seconds to empty meter entirely)
- The player is interacting with a [mural](#) (5 seconds to empty meter entirely)

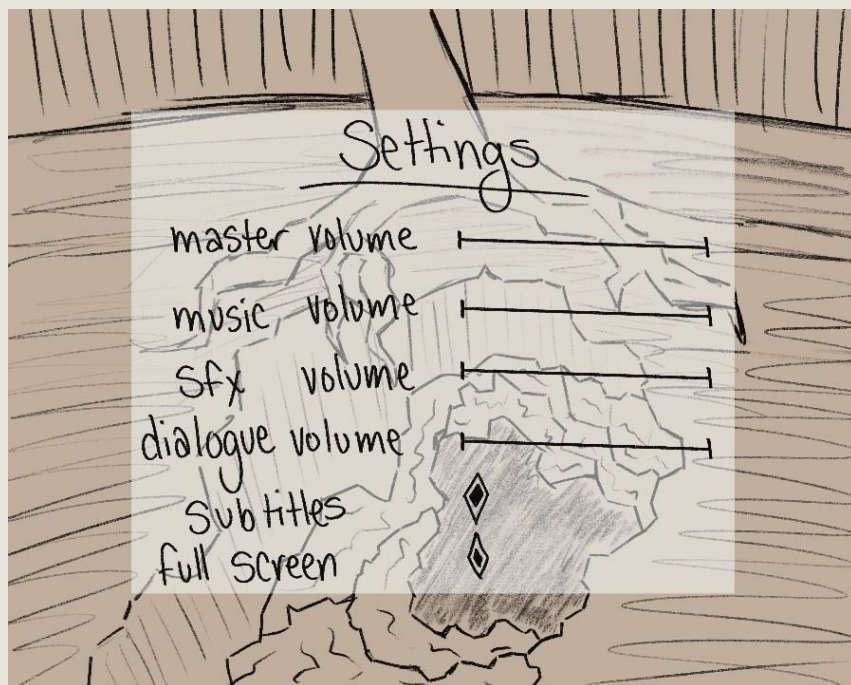
2.4. Screen Flow

2.4.1. Menus

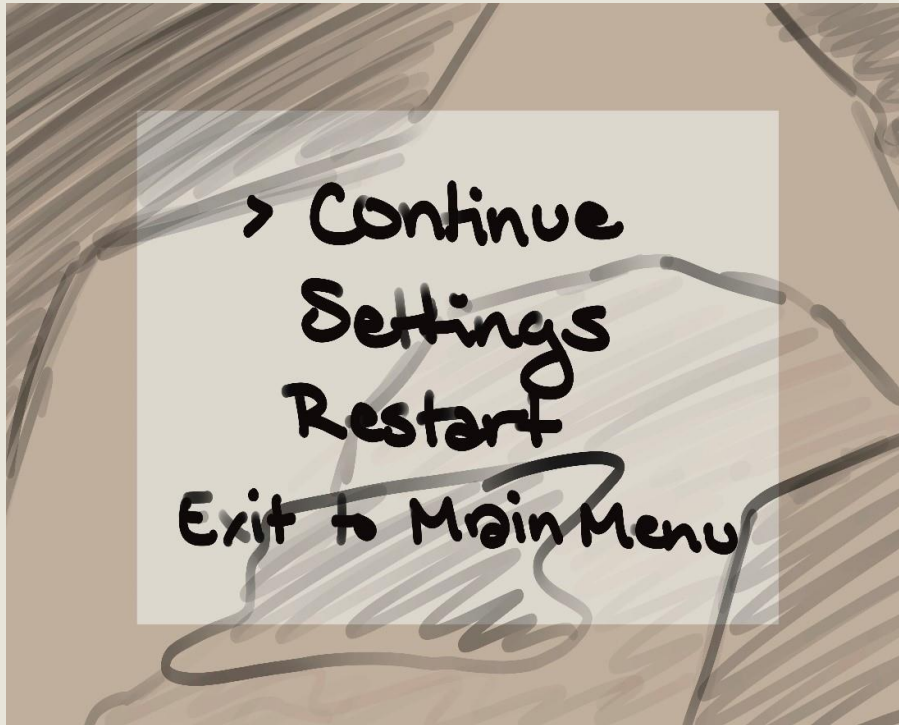
2.4.1.2. Main Menu



2.4.1.3. Settings



2.4.1.4. Pause

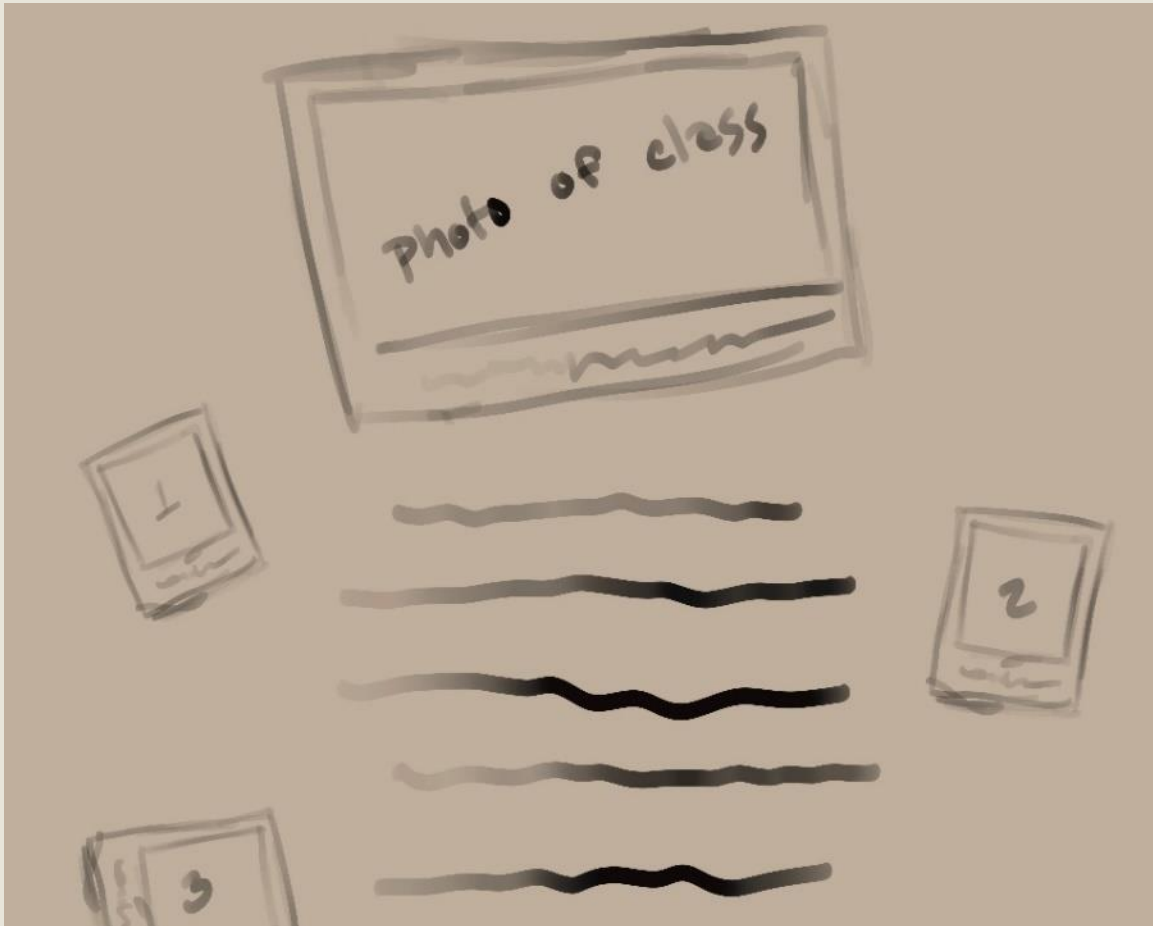


2.4.1.5. Game Over

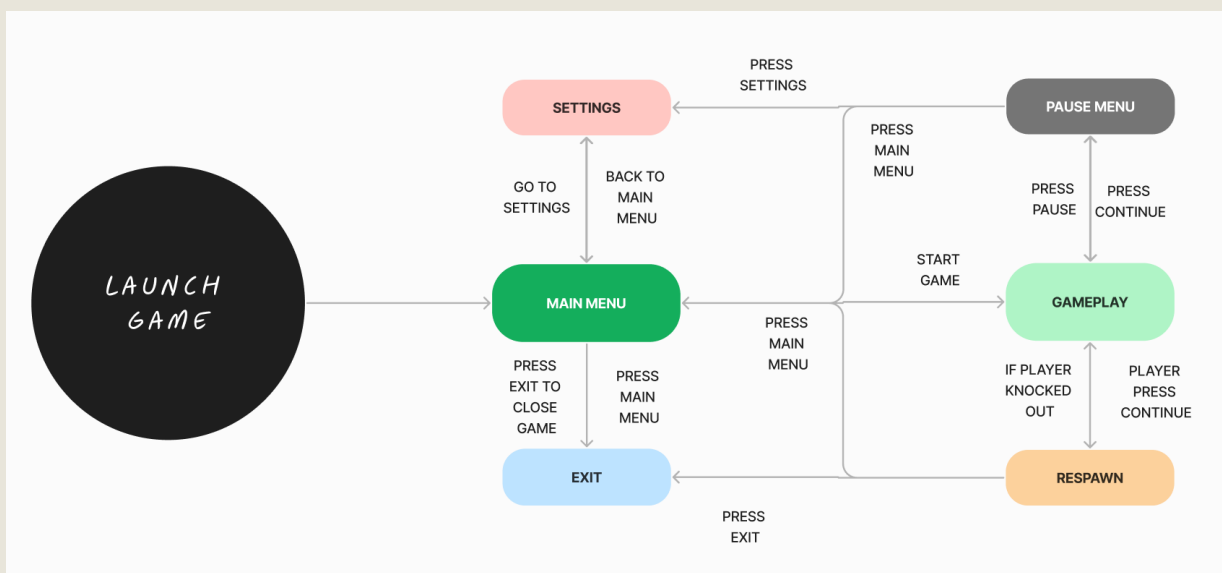


This screen will only appear if the player dies after they pick up the [map](#).

2.4.1.6. Credits



2.4.2. Flow



2.4.2. HUD



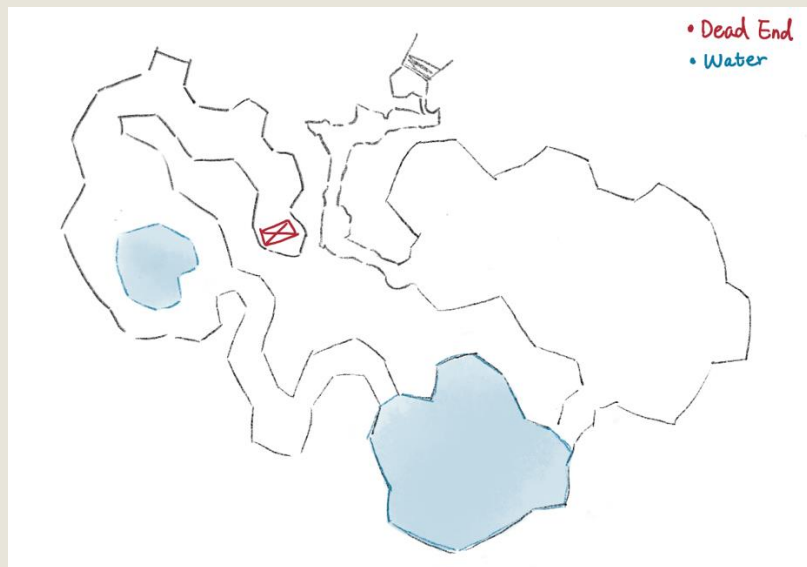
We will have subtitles that players can toggle on and off, so the game can be played by more people and for players that prefer to read information rather than only relying on hearing it during the game.

2.5. Replaying

Players that choose to respawn will find that each replay provides valuable knowledge towards their next playthrough. There are no changes to the actual game or enemy patrol patterns which allows a new approach and to develop new strategies and techniques based on what they already know. The player can explore more easily and may come across something they have missed in their previous playthrough. Once the player picks up the map from the [map room](#), they will unlock the ability to die if they cannot escape the cave fast enough. The player, if they do fail, will have the ability to respawn from where they picked up the map in the map room, or to quit the game and return to the main menu.

3.4.1. Tutorial and Love Room

This level provides the player with basic information about the game world and backstory. The player is introduced to the [mechanics](#) used in the game through a series of cave painting that will outline what keys are required to navigate obstacles and interacted with objects. The cave painting will appear to the player in a bright glowing blue outline, paired with an obstacle forcing the player into using each mechanics as they go. First the player will learn how to turn on their flashlight. The player will be stuck in a very dark hallway otherwise impossible to navigate without following the instructions. As the player turns on their light, they will notice that when pointing their light at a purple crystal it will begin to glow. Secondly the same style of painting will appear showing the player how to crouch under a lowered ceiling. Next the player will be introduced to a single jump then a double jump. This will be through a series of gaps in a rocky path forcing the player to start over from their last jump if they miss the target. Once the player has successfully passed these challenges, the cave painting will teach the player how to sprint, with avoiding a few scattered rocks in their path. At a certain point the player comes across the [first mural](#). The last glowing cave painting will appear to teach the player their interact key. The player must interact with mural to find the [symbol](#). Once the symbol is found the player must use this symbol to open stone doors along the way. The player will receive small lines of dialogue about their surrounds to provide additional context and to aid with building the backstory.



Our goal is to guide the player to uncover hidden history behind these seemingly natural scenes. As the tutorial section continues the player can explore and learn more about the [entities](#) that lurk in the shadows, slowly teaching the player their weaknesses. Ultimately this room will provide the player time to adapt to their environment before progressing into a larger scale world.

3.4.2. Present (Adventure)

This section starts off with a hole directly in front of the player with an [entity](#) on the other side of it. The player will have to jump down into this hole using the mushrooms on the sides of the cave walls to safely get down without being [stunned](#). The bottom of this hole is covered with many different types of flora before it then leads into the next large room of the cave.

In this next section, the player comes face to face with a room covered in crystals of all sizes. This room has the next three [murals](#) for



the player to look and interact with. They will have to avoid multiple [entities](#) that are

scattered around in this area. This room will have a large crystal in the back of the room that the player will have to climb to get up to the next section of the cave.

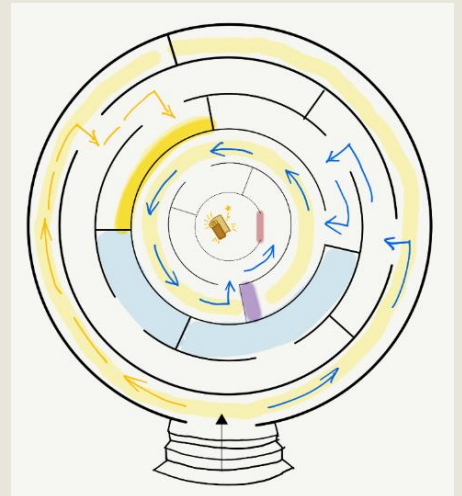
This upper ledge leads directly into a small opening that the player will have to crouch walk through to get to the next room. This room is

much darker and smaller than the other rooms and the player will have to rely heavily on their [crouch](#) and [flashlight](#) to make it through to the locked door. Getting through this winding path they will eventually have to use the [passcode](#) from the [murals](#) to get into the [map room](#).

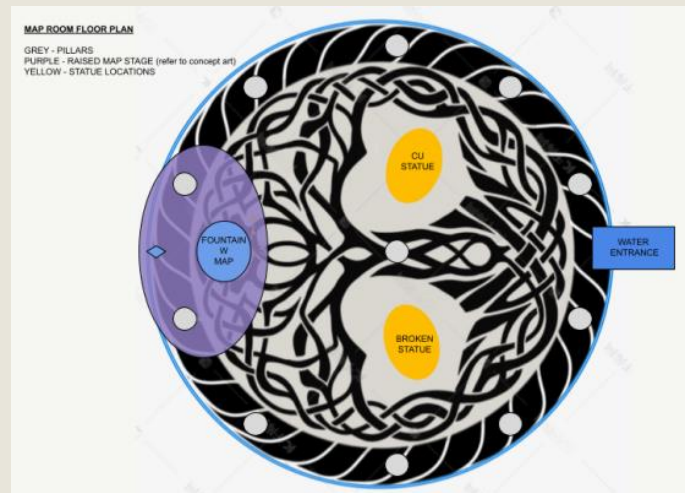


3.4.3. Future (Escape)

After unlocking the last door, the player will enter the Map Room, which is the of the final stage of the game. Carved into the floor of the Map Room is the Tree of Life symbol with Cu Chulainn's statue on the right side and on the left, a broken statue. In the center a tree pedestal holds the map to Moraveil. Once the player finds and interacts with the map,



the cave will queue a rumbling and a count down, displayed in the bottom left of the player's UI. Here the player will have a save point, if the player runs out of time, they will be forced to respawn in the map room directly after picking up the map. The player must reverse through the cave using the critical path that they laid out with the glowing crystals. Rocks around the player will fall randomly in addition to dust and camera shaking. Due to the cave collapsing, parts of the level will change. However, the critical path will stay the same. During the players exit, there will be no entities because the map was picked up by Riley. Once the player escapes, a cutscene will play where the camera will pan towards the map revealing the title Moraveil. Once the title is revealed the screen fades to black.



4. Narrative

4.1. Riley Power

4.1.1. Backstory

Riley Power is a 3rd generation black Irish American. As a child, Riley and his sister, [Caoimhe](#) [KEE-va] Power, spent a lot of time listening to stories from his grandparents. His grandparents moved from Ireland to America in search of new opportunities and hope for a more fruitful life. The parents have grown up listening to these stories and have been spreading the folklore to their children. Hearing lots of different stories about his heritage, Riley decided to further his academic studies about his homeland while never being able to visit. While in college, he discovered his love for uncovering the truth of ancient civilizations and decided to become an archeologist.

Currently, Riley is a professor, teaching students Intro to Archeology. He is raising money to fund his research so that he can go to Ireland and perform archaeological digs to uncover the truths of his native land. Caoimhe had been ill for a little while and one day she decided to go to the doctor to get a checkup. She found out that she has a hereditary disease called [Hemochromatosis](#) a.k.a. the “Celtic Curse”.

Having heard this news, Riley had a check-up done as well but was found to be in good health. With Caoimhe still suffering, Riley has tried to help as much as he can while letting the doctors take care of Caoimhe. Meanwhile, Riley conducted research on how to prevent this from occurring and came across a mysterious Island which supposedly holds the fountain of youth. This fountain holds healing properties for those dealing with sickness or curses. Armed with the knowledge of a potential cure for his sister and his future self if ever needed, Riley set off on a solo expedition to this island.

When he reaches the island, he starts to cough which shows that he’s slowly starting to get sick with the same disease.

4.1.2. Personality

Riley is a scholar at heart, one who cares deeply for his family. He knows much about his chosen field of study, that being Celtic myth, and is more than willing to share that knowledge. Though he is more comfortable behind a desk or in front of a computer, his love for his [sister](#) has driven him to seek out Moraveil’s legendary Fountain of Youth, hoping to find a cure for his family’s [hereditary disease](#), the “Celtic Curse”, before it robs him of his sister, and before it takes his own life. Despite his desperation, he is not well suited to a life of adventure, the stress of it might just kill him.

4.1.3. Abilities

Riley Power has the abilities of an average human, with no supernatural abilities.

4.1.4. Relationship to Other Characters

Riley cares deeply for his sister, [Caoimhe Power](#), whose illness spurred him on to finding the map to Moraveil. They've been close since Caoimhe's birth, and though their paths in life have differed, they still take the time to maintain their relationship.

Riley is fascinated by the [entities](#), creatures that prove that his studies were not of myth, but history. However, he is also terrified of them, as he knows the stories of what they do to people like him and seeks to avoid their notice whenever possible.

4.2. Plot Elements

4.2.1. Setting Backstory

The game is set in a world much like our own, with a major exception. Alongside the world of the mundane, there exists a hidden world of wonder and terror, a fae world of monsters and mysteries, Moraveil. This other world bleeds into the more mundane one in certain places, including the caves of the Isle of Skye, and an unknown location that exists as a permanent gateway between the normal world and Moraveil, the land of the Fae.

Moraveil is a place sought after by many, known as a land of immortality, a place with access to a fountain of youth. Along with its more obvious benefits, the Fountain of Youth is theorized to be the cure to any number of genetic diseases, including Hereditary [hemochromatosis](#), which is where our protagonist, Riley Power, comes in. Riley desires the Fountain not for its gift of immortality, but for its ability to relieve his family's suffering.

Notably, while the actual existence of Moraveil is not known of in the general populace, it is a known part of this world's version of Celtic mythology, taking on the role of Faerie, Annwn, and the other various Otherworld's of said mythology. Riley knows of it through his study of Celtic Folklore and is one of the lucky few who realized that Moraveil is not mere myth, but terrifying reality.

4.2.2. Disease Information

Hereditary hemochromatosis is a genetic disorder that can cause severe liver disease and other health problems. It's a disorder in which the body can build up too much iron in the skin, heart, liver, pancreas, pituitary gland, and joints. Too much iron is toxic to the body and over time the high levels of iron can damage tissues and organs and lead to Cirrhosis (liver damage), Hepatocellular Carcinoma (liver cancer), Heart problems, Arthritis and/or Diabetes.

4.2.3. Story Summary

[Riley Power](#) ventures to the [Tomb](#) of [Cu Chulainn](#) in order to find the map to Moraveil and its fountain of youth. He believes this is the only cure to the [hereditary disease](#) that plagues his family, which has recently revealed itself in his sister. Once there, he finds Fae entities that guard the cave, murals that reveal the story behind the tomb, and cryptic warnings about Moraveil's sinister nature. Once he obtains the map, the cavern begins to collapse, and Riley must escape before he perishes.

4.2.4. Polaroid Image

[Riley](#) will be sitting next to [Caoimhe](#) while reading a book about the Fae inhabiting the [Isle of Skye](#) while in a hospital bed. Riley: "I hope Caoimhe is doing okay; the [Celtic Curse](#) looked like a pain to endure."

4.2.9. Ending

In order to achieve the ending, you must escape the cave by retracing your steps from the map room back to the entrance. Once you exit the cave, the win screen will appear, [Riley](#) will speak and the credits will roll.



4.3. Non-Player Characters (NPC)

4.3.1. Caoimhe Power

4.3.1.1. Backstory

She is [Riley Power's](#) ailing sister, a central figure in his life and the driving force behind his relentless research into the realm of Moraveil. Though shrouded in mystery, her presence and condition deeply influence Riley's quest for answers.

4.3.1.2. Relevance to the Story

Caoimhe is the reason Riley is on this journey in the first place. Her [illness](#), and a lack of any known cure, sent Riley into a frenzy of research, during which he found evidence of the fabled fountain of youth in Moraveil.

4.3.1.3. Relationship to Other Characters

She is Riley's sister. She cares for her brother deeply, often listening to stories he told her of the strange mythology he studies. Despite the journey being for her sake, Caoimhe didn't want Riley to go, as she feared he would not return in time. Caoimhe has no relationship to Aaron or the Entities.

4.3.2. Cu Chulainn

4.3.2.1. Backstory

Cu Chulainn is a hero of Irish mythology, a son of the god Lugh. He has [numerous stories about him](#), but most relevant to this game are his training under Scathach, his elopement with his wife, Emer, and his death.

4.3.2.2. Relevance to the Story

The setting of the game is the caves [Cu's tomb](#) on the [Isle of Skye](#), where the map to Moraveil is housed. The symbols used for the code to the map room are hidden in murals depicting his life and times, with the discovery of each [mural](#) prompting a piece of dialogue that reveals something about the game's setting [and Riley's backstory](#).

4.3.3. Entities

4.3.3.1. Backstory

The entities are the Fae creatures that guard the Tomb of Cu Chulainn. Not much is known about them or their history, but they seem to have been in the caves for long old servants of Cu Chulainn who have stayed with him to protect his tomb, and the map stored within. They seem to be a variant of Will-O'-the-Wisps, tiny Fae spirits that lead travelers astray in the forest. These ones, however, are larger and more aggressive, and seem to prefer the shadows of the caves to those of the forest.

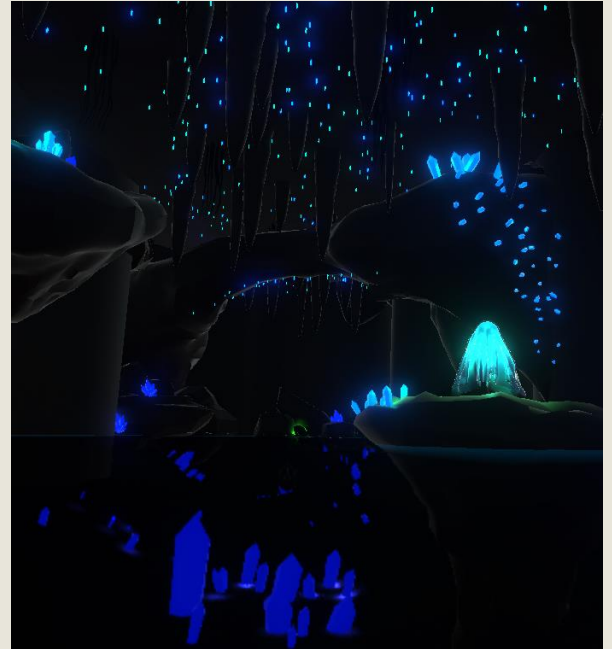
The Entities respect Cu Chulainn as a hero of old, and as their former master while he was alive. This respect has caused them to stay with his corpse for eons untold, guarding it and the [map](#) against all who would dare disturb his rest.

4.3.3.2. Abilities

The Entities possess a few supernatural abilities. They produce an eerie blue light, levitate a short distance off the ground, and have some sort of ability that can immobilize close by creatures, which they use to capture unwary treasure-seekers. They also seem to possess some way of sensing when there are intruders in their cavern home, which seems to cause them great annoyance when they can't find the source of it. The Entities hate water because it extinguishes their fire. If they touch the water, their body will absorb the water and drag them underneath the surface.

4.3.3.3. Relevance to the Story

The Entities are one of the primary obstacles in the game, capable of incapacitating [Riley](#) when he gets too close. They force the player to think about their route through the game, and the timing of any movement they make.



5. Audio

5.1. Audio Themes

The overarching music genres that will make up the game's tracks come from a mix of Lo-fi and Dark ambience with a touch of contemporary sounds, mainly for their diverse range in effected instruments which varying tones that aim to directly affect how the listener feels. There will be subtle rock elements incorporated to breathe more life into action sequences, more specifically a stripped-down version of the genre's drumming style with lead guitar blended for high stakes feelings during chases. That will eventually change the feel of the game as it progresses from a slow eerie walk in a cave to a life-threatening rush of danger in the form of Roaming entities, falling rocks and soon to be familiar hazardous terrain.



5.1.1. Menu Soundtrack

[Intro Track](#) to Moraveil Intro track.

5.1.2. Gameplay Soundtrack

To give players a cinematic game experience, the audio will be crafted to create a soundscape, where constantly shifting audio added to the visuals, will pull players into an all too real immersive experience.

To meet that goal, there will be several stylistic constants in the music throughout the game. One of which is the instruments used, a mix of Strings, Acapella, Drums and Synths will be used to set a familiar mood through the game as player's travels the map. Another effect used to create a unique spatial feel, is a special mix from using, Reverb, EQ, and a pair of compressors in series, in order to create a surround sound experience, without taking too much away from the visual aspects.

5.1.2.1. Main instruments used:

- Violin
- Cello
- Acapella (voices)
- Drums (cinema & acoustic)
- Synths
- Guitar
- Trumpet
- Keys
- Bass
- A range of wind instruments



5.1.2.2. References:

- Reference tracks ([Spotify](#))
- Orchestra reference tracks ([YouTube](#))

5.1.3. SFX

Stylistically, the game will have a realistic base to its sound effects, i.e. footsteps velocity plus the varying surfaces they'll walk over determine and change player walking and landing sounds and which through the game will vary slightly from one another. sounding unique. To make the audio effects stand out, a style of mixing that uses reverb to create shaped echoes along with dynamic and chorus effects will be layered specifically when the main character interacts with in-game artifacts. Much of the audio effects in game will be made separately to fit the underwater and above water elements of the game where the latter has more free flowing sounds in the open spaces of the game, the underwater sounds will have a very filtered feel to the audio experience. Here the base layer of the sound would aim to simulate the feeling of an imminent threat of drowning.

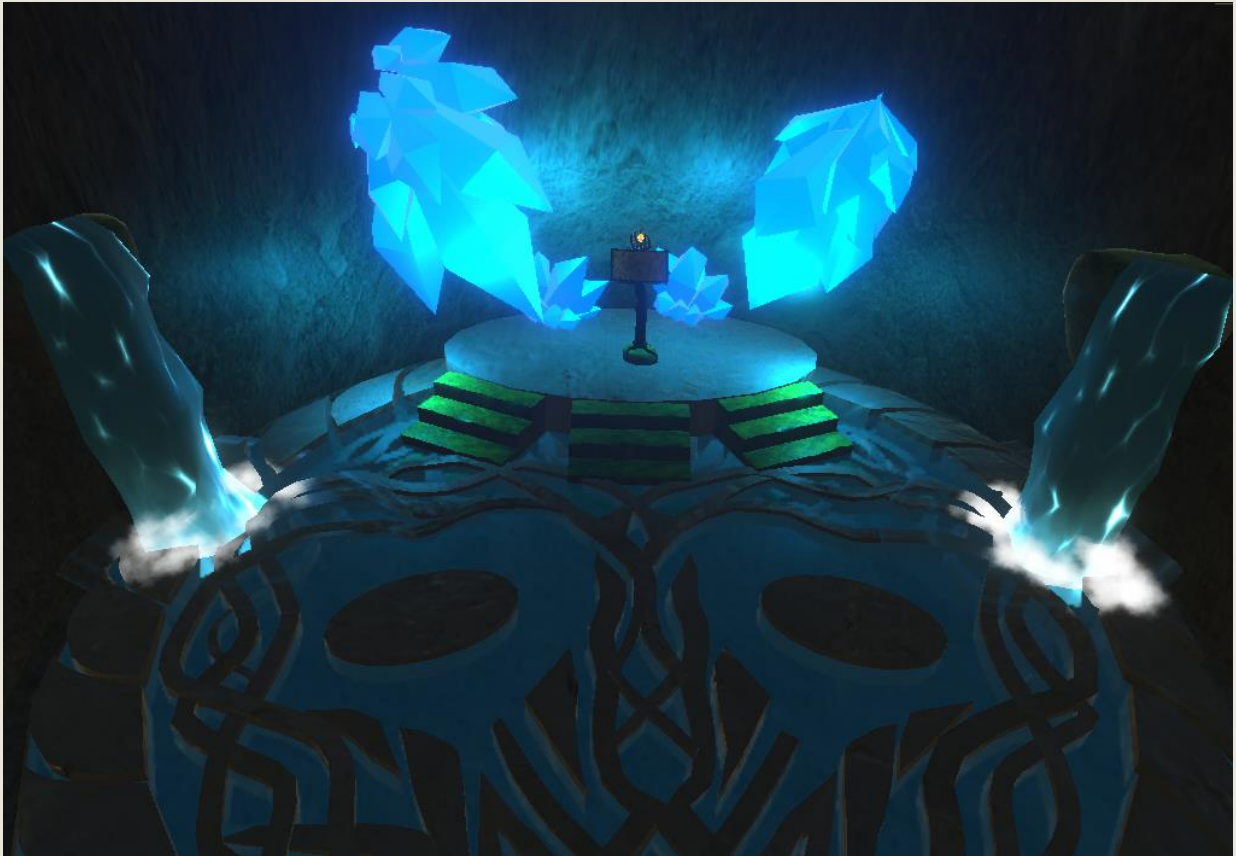
[Asset list](#)

5.1.3.1 Music

- [Music – Love Room](#)
- [Track 5 - Map Room](#)
- [Game Tutorial](#)

5.1.3.2. SFX

- [Environment](#)
- [Human](#)
- [Water sfx](#)



6. Visuals

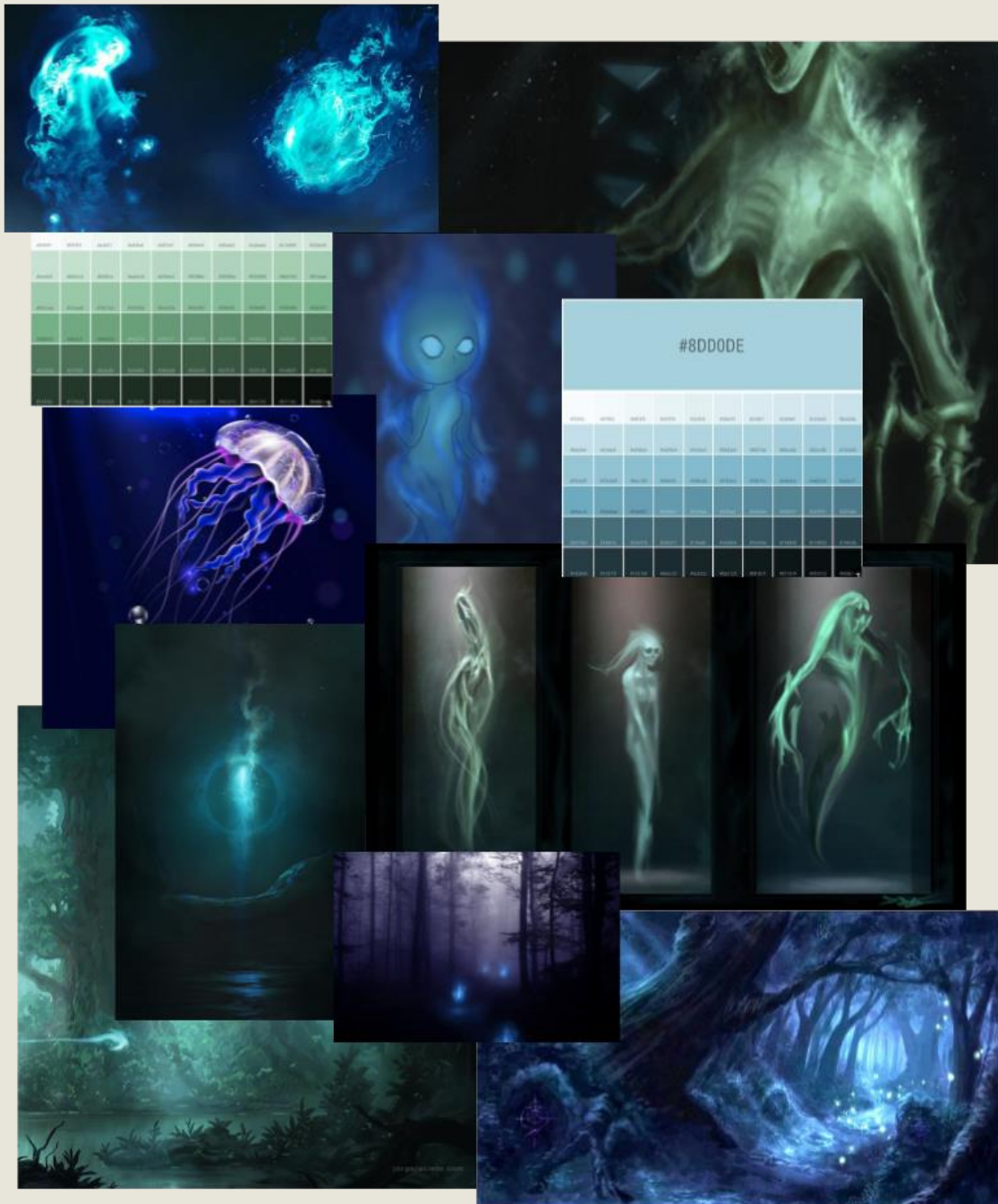
6.1. Aesthetic Themes

6.1.1. Moodboard



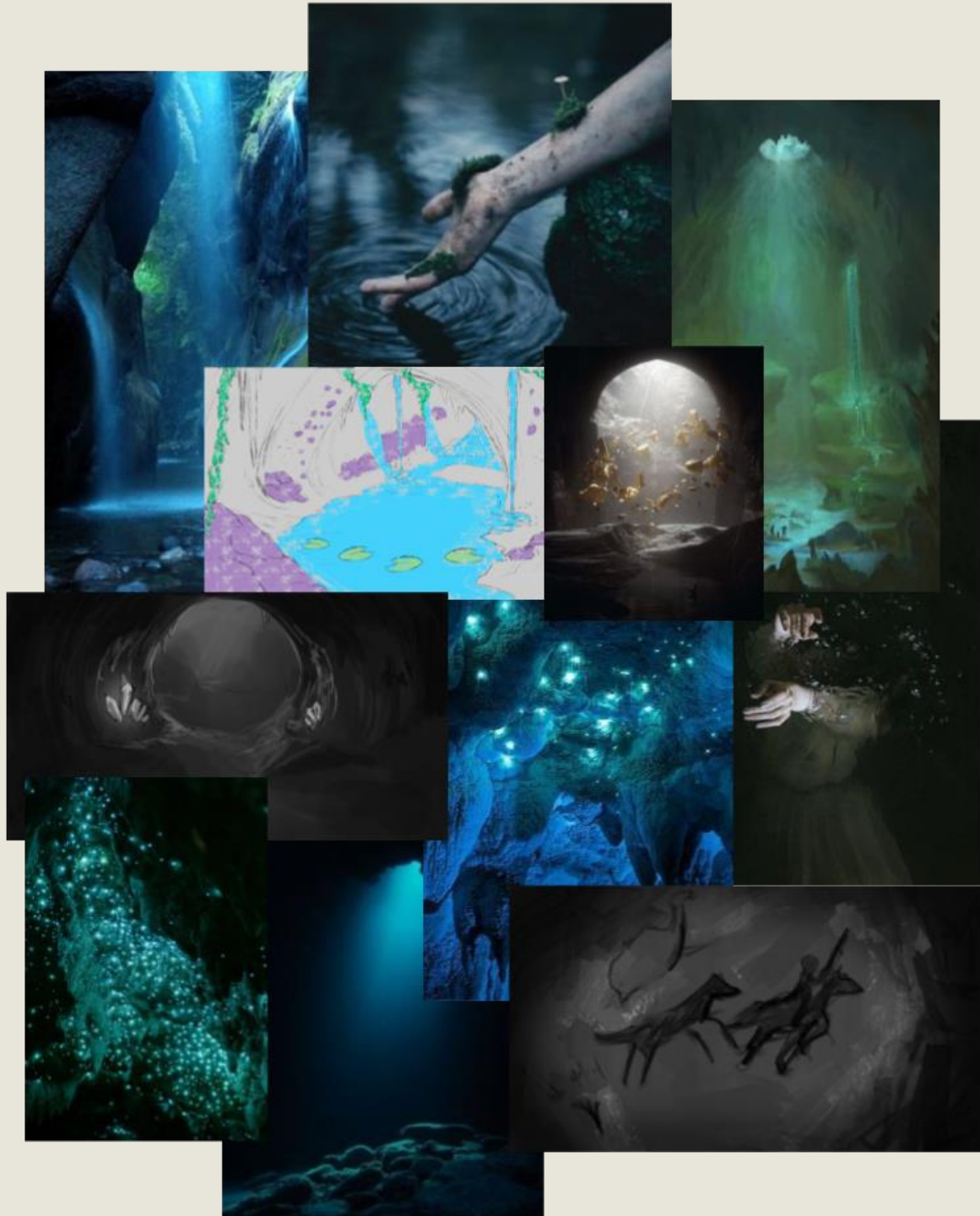
6.1.2. Ambiance

The inspiration of Moraveil's graphic is a captivating blend of both whimsy and eeriness, setting the tone for an enchantingly spooky adventure down in the dark of a cave. The visual aesthetics contribute to the player's immersion in this fantastical world. All elements come together as a 3D modeled and textured set of graphics, enhancing the journey into the captivating and mysterious cave.



6.1.2.1. World

The environment is blended with a palette of blues and greens, creating an otherworldly ambiance. Mysterious [entities](#) within the cave emit ethereal blue light, displaying the enchanting world of the Fae creatures lurking about.



6.2. Graphic Style

Drawing influences from liked art styles such as [Chainsaw Man](#) and [Studio Ghibli anime](#), the graphics will exhibit a semi-realistic but stylized quality bringing the games world to life.

Mushrooms, rocks, and pillars are adorned with a painterly style reminiscent of references such as Arcane: League of Legends, Teenage Mutant Ninja Turtles: Mutant Mayhem, Spiderverse and Disney's Wish.



6.2.1. 3D Assets

Our 3D Assets designed and modeled using realistic feel in combination with our 2D assets to bring our fae atmosphere to life. Focusing on keeping a high enough poly count so that our meshes are smooth and with high detail for up close viewing.

6.2.2. 2D Assets

Our 2D Assets take inspiration from Celtic artwork. Combining our various art style inspirations within the 3D assets and the Celtic solid colours and linework, we will take a painterly approach to our murals. Loose painted brushstrokes and choppy splatters of paint as if it was fresh off a palette knife give Moraveil its fantastical and Fae atmosphere. This artistic vision allows the player to experience walking through history as if it was painted on a canvas. With the weaving of brushstrokes, we will be able to emulate our Irish influencers and Celtic knots.



7. Technical

7.1. Game Engine

Unity (version 2022.3.7f1)

7.2. Version Control

Using [GitHub](#).

7.3. Programming Language:

Language: C#

7.4. Art and Audio Tools

3D Modeling Software: Autodesk Maya (version 2024.1), Nomad

3D Texturing Software: Adobe Substance 3D Painter, Procreate

2D Illustrating Software: Adobe Photoshop 2023, Procreate

7.5. Sound Tools

DAW: FL Studio 20

DAW: Reaper

7.6. Game Requirements

Platform: Windows 10

7.7. Resources

In this section are learning recourses for various programs and software that are needed to help build and shape the game.

7.7.1. Maya Modeling Tutorials

- [Udemy Maya Modeling Course](#)

7.7.2. Substance Painter Resources

7.7.2.1. Substance Painter Tutorials

- [Ghibli Style Enviroment](#)

- [Udemy Substance Painter Course](#)

7.7.2.2. Texturing Library

- [Texture.com](#)
- [Quixel.com](#)

7.7.3. Audio Mixing Reaper

- [Crash course mixing](#)
- [Sends & Busses](#)

7.7.4. Recording

- [Recording in Reaper \(short\)](#)
- [Recording in Reaper \(long\)](#)

7.7.5. Audio Mixing FL

- [Clean muddy mix](#)
- [Adding reverb](#)
- [FL Keyboard shortcut](#)
- [Render project](#)

7.7.6 FL 20 Recording

- [Record in FL](#)

7.7.7. Audio Mixing in Audacity

- [Audacity Basics Crash Course](#)
- [Mixing and Effects In Audacity](#)

7.7.8. Audio in Unity

- [Audio mixers the basics](#)
- [Add Multiple Sound Effects](#)
- [Script](#)
- [Mixing+ more](#)

7.7.9 Video Editing

- [DaVinci Resolve Crash Course](#)

7.8 Naming Conventions

7.8.1. Folder Structure

- /scripts
- /prefabs
- /sound
- /texture
- /images

7.8.2. Assets

- Prefabs: prefabName
- Scenes: sceneName
- Scripts: ScriptName
- Materials: materialName
- Textures: textureName
- Sounds: soundName / soundName
- Animations: animationName
- UI: elementName

Assets will use the Camel Case methods

Audio asset naming conventions

Music(#)

sfx_(type)(#) // Human, Environment, Underwater,

Dialogue(type)(#) // Riley, Mobs/Entities, Overdub

7.8.3. Scripts

Scripts will follow Pascal case eg. PlayerController, GameManager.

7.8.4. Game Objects

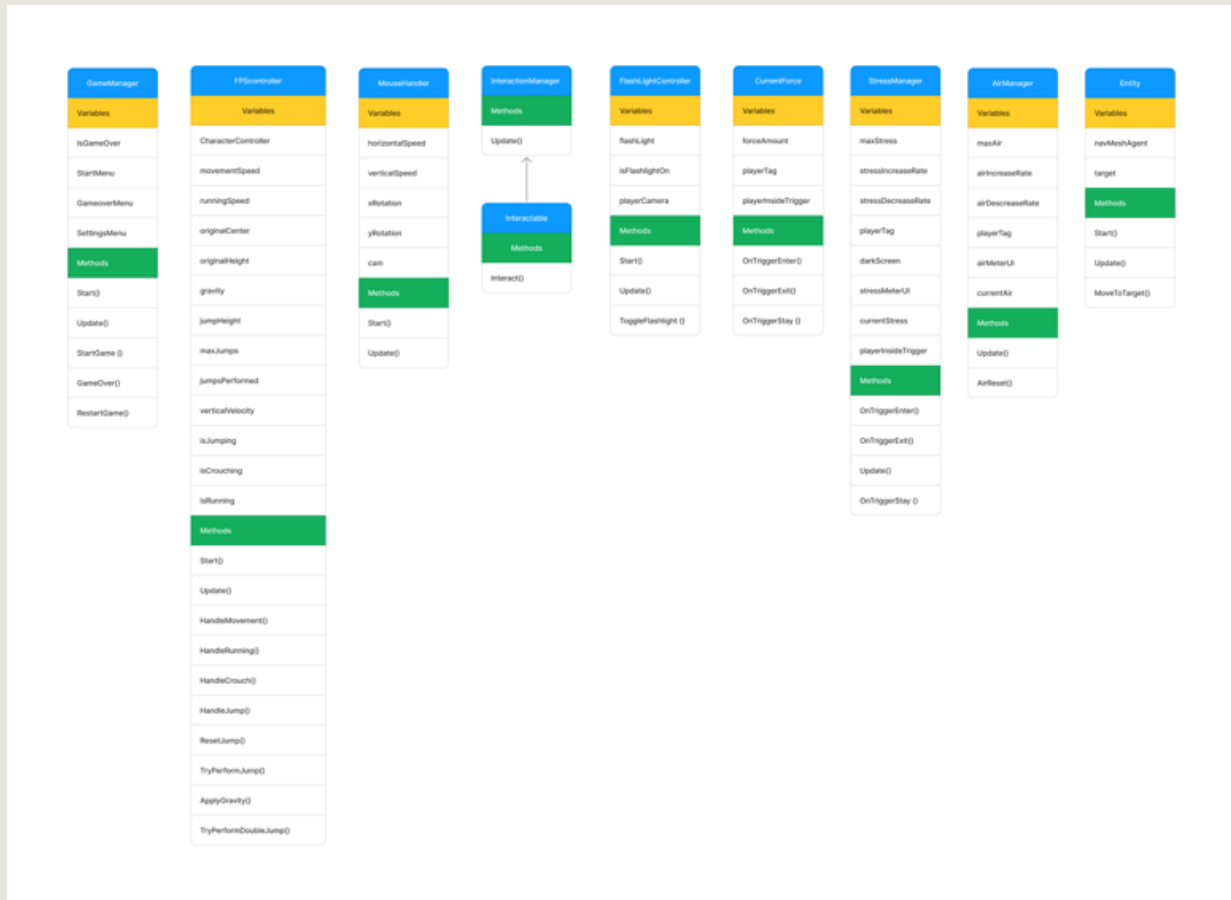
Game objects will follow CamelCase in descriptive eg. mainDoor, cameraLighting

7.8.5. Methods

Methods will follow Pascal case eg. ToggleHeadLamp() , RestartGame()

7.8.6. Classes and Methods

Individual Classes and methods in more detail are in the technical documentation, below is the UML diagram.



7.8.7. Links:

TDD: [Moraveil Technical Document.docx](#)

UML: [Board](#)

7.9. File Requirements

7.9.1. 3D Models

Format: FBX

Texture Format: PNG

Texture Resolution: 1024 x 1024

Polygon counts: 1500-2000 per mesh

7.9.2. Sound

Format: WAV

Sample Rate: 44100 - 48000

Bit-Depth: 24 bits

Compression: non

7.9.3. Images

Format: PNG

Resolutions: 1080p x 1080p

7.10. Quality Assurance

In order to assess the playability of this game, the QA team will frequently test the game by playing it. They will then document their findings in a [spreadsheet](#). From there, they will either fix the problem themselves or report their issues to the Programming team if said issue is too complex to amend on their own. Testing is done every 2 weeks where a build is released and shared.

7.10.1. Functional Testing

This is the testing process of ensuring that the core gameplay [mechanics](#), UI and any interactions are tested.

7.10.2. Regression Testing

This is to prevent any new changes from introducing bugs or breaking any existing functionality.

7.10.3. UAT (User Acceptance Testing)

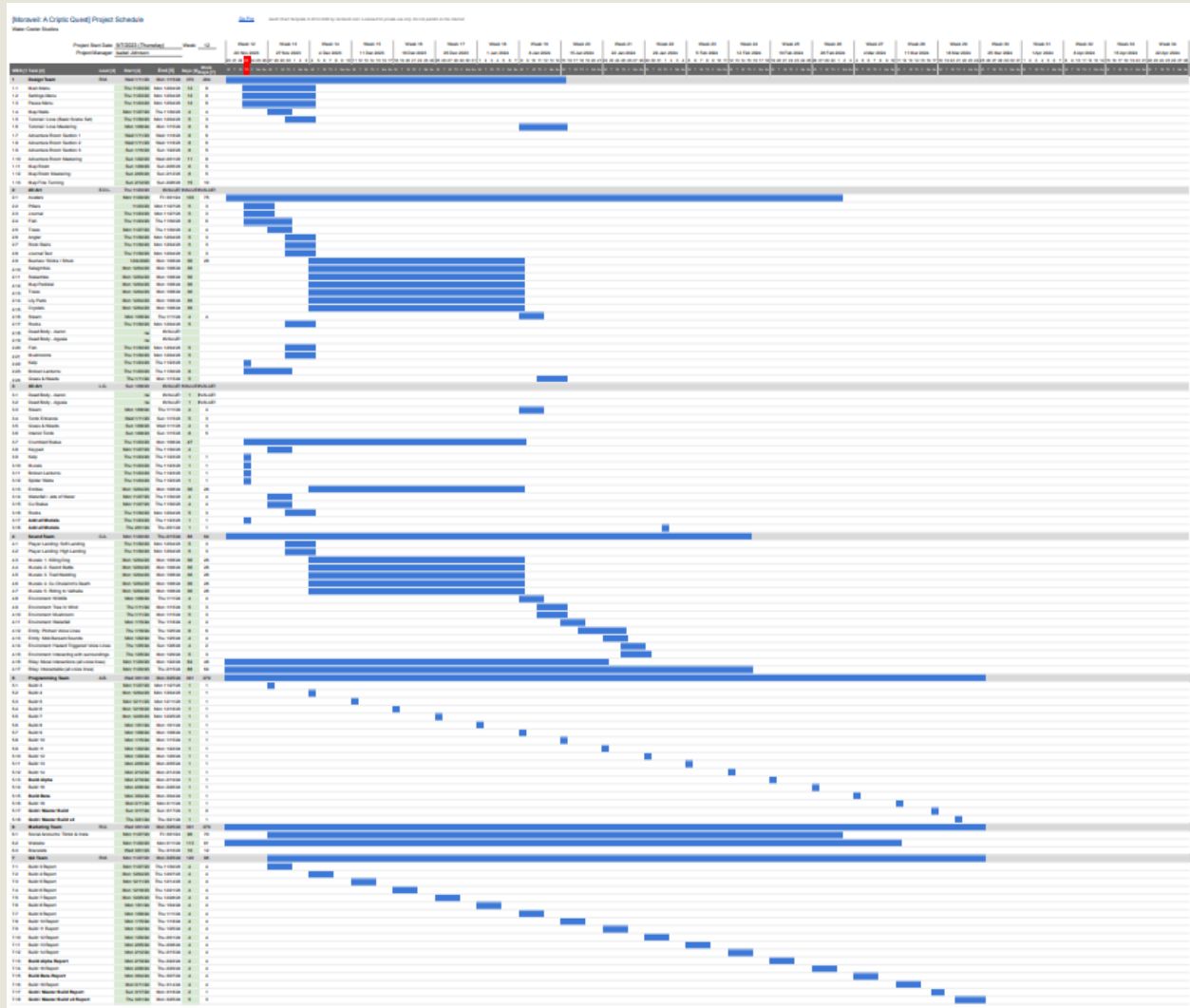
This involve potential players and groups testing the game, The tester would receive an online form to be able to share their feedback. The online form service of use would be the Microsoft Forms.

[GitHub](#) Issues and its project board will be used to identify, and share identified issues and keep track. Debugging is then done the following week for fixing and improvements and the week after is additional features or [mechanics](#).



8. Production

8.1. Gant Chart



8.2. Policies

8.2.1. Absences and Late Arrivals

Every team member is required to participate in the team project actively and constructively, as specified in our course outline. In cases where a student accumulates **five** unapproved absences during the academic year, their individual performance assessments (25%) will be graded as **zero**. Additionally, arriving late or departing early without prior approval may be counted as 'absences' at the discretion of the instructors.

8.2.2. Submissions

The timeliness of work impacts the overall project and the distribution of individual grades. Work will be considered as submitted **only** if it's added or updated in the project repository. Attendance at the weekly production 'check-in' meeting is **mandatory** for grading that week.

8.2.3. Expectations

In addition to class meeting hours (Mondays 12-7pm and Thursdays 2-6pm), students are expected to spend a **minimum** of an additional **10 hours** per week on the course and project.

8.2.3.1. Skills

Each student will have direct responsibility for specific aspects of the project, which will entail unique assigned tasks and responsibilities. By embracing your designated role and its associated duties, you are expected to cultivate **new skills** and expertise in an **additional area**.

8.2.3.2. Respect

Students are expected to demonstrate **respect for all** their fellow team members engaged in this project. This involves active listening, clear communication, and fulfilling all commitments. In the event of differences or concerns with other team members, it's encouraged to directly address concerns with the relevant person and/or team leads. Please tackle issues directly with the involved party whenever possible.

8.3. Credits

Production

Producer/ Director: Isabel Johnson

Design

Creative Director: Rachel MacNichch

Original Concept: Isabel Johnson

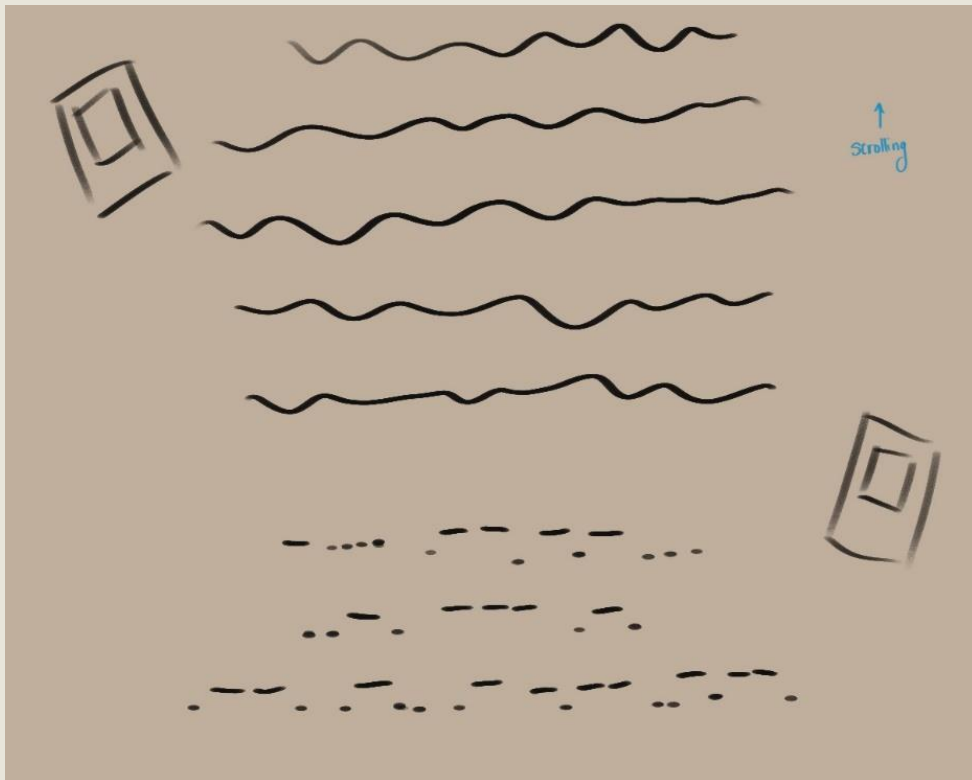
Level Design: Xinyi (Cicia) Chen

Game World Research: Rory Dunton, Amani Hughes, Sam Dalbayrak

Programming/Engineering

Lead/ Supervisor: Abubakar Bunamay

Support Staff: Logan Gaetz, Isabel Johnson



Writers

Lead/ Supervisor: Rory Dunton

Dialogue: Rory Dunton, Amani Hughes, Sam Dalbayrak

Character Development: Amani Hughes

Narrative Research: Rory Dunton

Art/Graphics

Lead/ Supervisor: Rachel MacNinch

Concept Artists: Emily De Luca, Isabel Johnson, Rigel Quindipan

Menu/ HUD Graphics: Rachel MacNinch

3D Artists: Logan Gaetz, Rigel Quindipan, Isabel Johnson

Story/ Moodboard: Isabel Johnson, Rachel MacNinch, Antonio DuGiovanni

Texturing: Emily De Luca, Logan Gaetz

UX/ UI: Cicia Chen

Audio

Lead/ Supervisor: Caleb Awinoron

Sound Effects: Caleb Awinoron, Rigel Quindipan,

Featuring Musicians: Alexa Brown (Trumpet), Abdulai Dace Golfa (Vocalist)

Voice Acting: Amani Hughes

Quality Assurance

Lead/ Supervisor: Rachel MacNinch

Team: Amani Hughes

Marketing

