Malady in Bree

Spatial Storytelling

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B022209l

Malady in Bree

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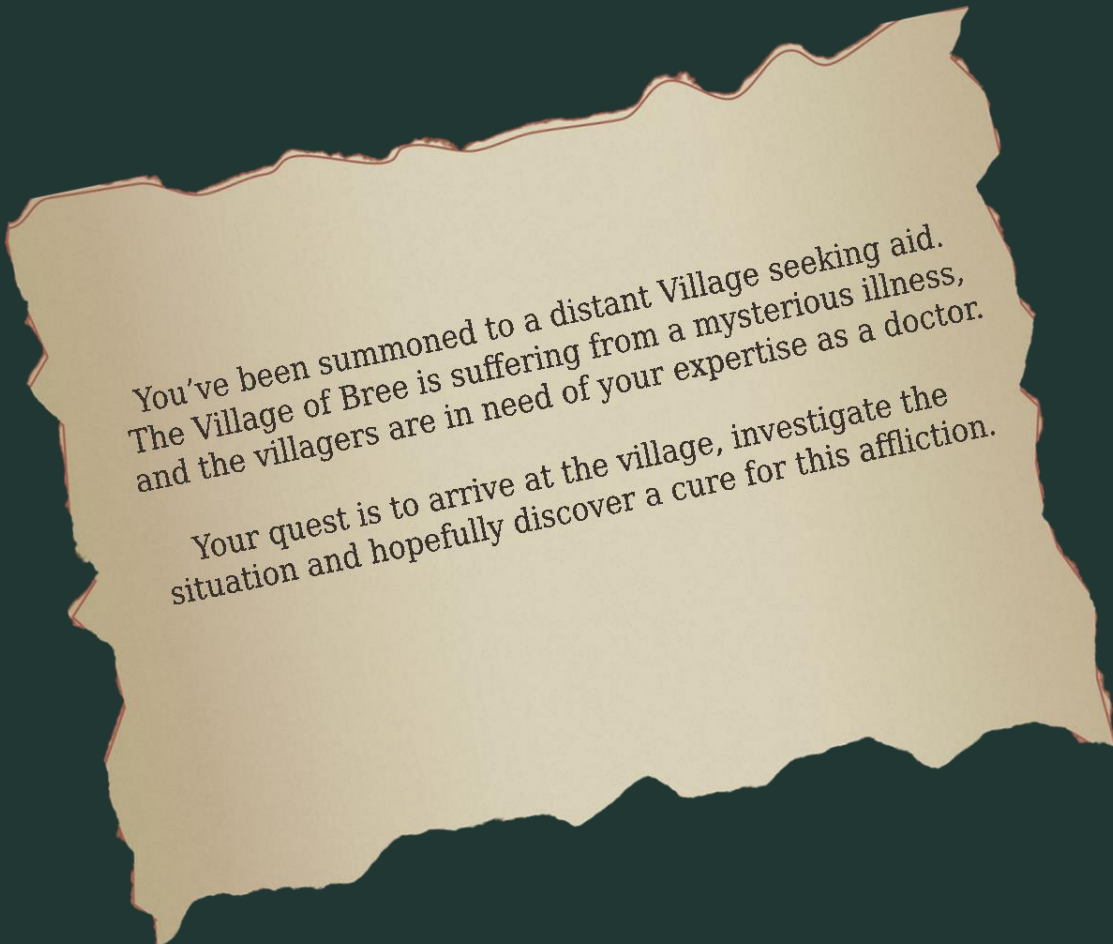
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Malady in Bree

Overview

Project Summary

This project features design work for a playable demo of Malady in Bree. The demo contains 3 zones as the player character approaches the village of Bree. These 3 zones act to introduce the narrative and mechanics of the game.

You've been summoned to a distant Village seeking aid. The Village of Bree is suffering from a mysterious illness, and the villagers are in need of your expertise as a doctor.

Your quest is to arrive at the village, investigate the situation and hopefully discover a cure for this affliction.

My project and its environments were primarily inspired by games such as Baldur's Gate 3 (Studios, 2023), Divinity Original Sin 2 (Studios, 2017) and The Witcher 3: Wild Hunt (RED, 2015).

I consider Disco Elysium and Return of the Obra Dinn my secondary inspirations as I wanted to create mechanics and narrative devices like those two games.

Narrative

Malady in Bree features a narrative which is told primarily through what remains of its characters and the land around them. Writing these characters was like writing characters as a Dungeon Master to feature in your Dungeons and Dragons

Campaign. Each of these characters feature in the game through the environment as the player investigates pieces of the recent past.

Each character and key point must serve a purpose in the narrative to teach the player about the world. The tricky part for me was finding the right number of characters to use in a short introduction to the game and I think while I did a good job there were a few aspects I never got to explore in my narrative which I'm excited to expand on in a full version of the game.

I ended up writing the following characters:

Igland the Merchant

o A paranoid Merchant and Wainwright.

o Never trusted Wizards.

o Stole a magical artifact from the Oswald the Wizard.

o Perished on the road to a large beast.

o Brother to Igwald the villager.

Oswald the Wizard

o A proud Sorcerer and skilled artificer.

o Delved deep into the caverns beneath his town to uncover powerful crystals.

o Ignorant to the happenings outside his tower.

o Perished to Igland the Merchant.

Archibald the Necromancer

o Just a passerby.

o Profiting from all the corpses created from the crystal plague.

o Owner of two friendly ghouls – Wriggles and Writhing.

   • Perished from a large beast who was raised from the dead by Archibald.

Igwald the Villager

o   Brother to Igland the merchant.

o   Assisted in the murder of a vegetative Oswald.

o   Died shortly after from succumbing to the crystal plague and falling down the tower stairs.

The Workers of Bree

o   A large group of skilled workers.

o   Employed to build a road through the cave by the village to make transport easier.

o   Contracted later by the Wizard Oswald to collect the magical crystals in the cave.

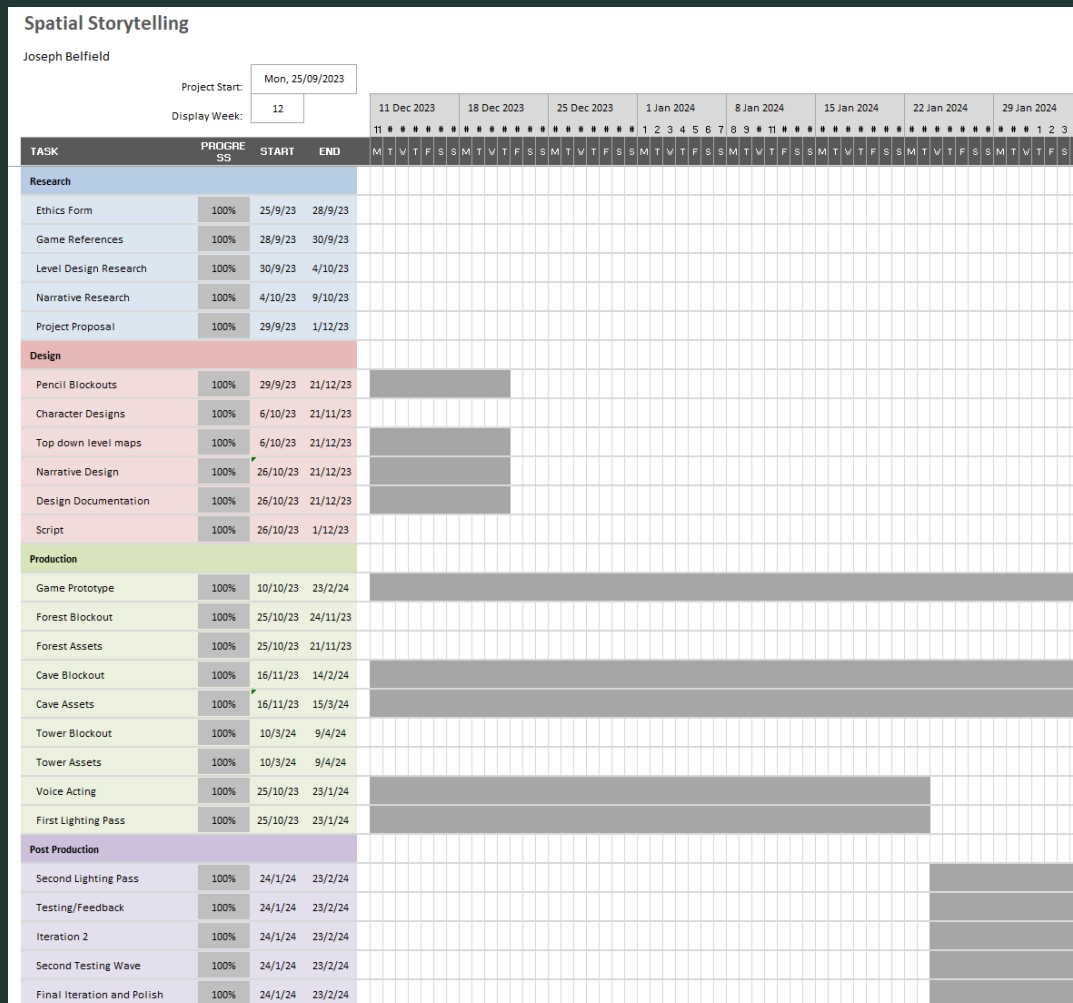o   There is no sign that any of these workers survived the conditions beneath the village.

Wriggles, Writhing and Sir Loam.

o   Three undead minions given life by Archibald the Necromancer to perform menial labour.

o   Wriggles and Writhing were created from the remains of some of the workers underground.

o   Sir Loam was created from a dead hound he discovered in the cave.

o   Sir loam never carried any bodies since he immediately killed his creator and minions before running away only to be seen later by a fleeing Igland who would perish on the road.

Gantt Chart

Early on I produced a Gantt chart to plan and keep track of my progress as I go further into my project.

Spatial Storytelling

Joseph Belfield

Project Start: Mon, 25/09/2023

Display Week: 12

TASK	PROGRESS	START	END
Research			
Ethics Form	100%	25/9/23	28/9/23
Game References	100%	28/9/23	30/9/23
Level Design Research	100%	30/9/23	4/10/23
Narrative Research	100%	4/10/23	9/10/23
Project Proposal	100%	29/9/23	1/12/23
Design			
Pencil Blockouts	100%	29/9/23	21/12/23
Character Designs	100%	6/10/23	21/11/23
Top down level maps	100%	6/10/23	21/12/23
Narrative Design	100%	26/10/23	21/12/23
Design Documentation	100%	26/10/23	21/12/23
Script	100%	26/10/23	1/12/23
Production			
Game Prototype	100%	10/10/23	23/2/24
Forest Blockout	100%	25/10/23	24/11/23
Forest Assets	100%	25/10/23	21/11/23
Cave Blockout	100%	16/11/23	14/2/24
Cave Assets	100%	16/11/23	15/3/24
Tower Blockout	100%	10/3/24	9/4/24
Tower Assets	100%	10/3/24	9/4/24
Voice Acting	100%	25/10/23	23/1/24
First Lighting Pass	100%	25/10/23	23/1/24
Post Production			
Second Lighting Pass	100%	24/1/24	23/2/24
Testing/Feedback	100%	24/1/24	23/2/24
Iteration 2	100%	24/1/24	23/2/24
Second Testing Wave	100%	24/1/24	23/2/24
Final Iteration and Polish	100%	24/1/24	23/2/24

Level Overview

The two main areas of the demo are the forest and the cave. The forest acts as a short tutorial for the player to discover how to investigate and use their journal. The cave takes these mechanics and lets the player explore them alongside the narrative as it begins to unravel. The white line on the key as "Forest Path" and "Main Road" detail the critical path through the level.

It was also important to evenly distribute any interactions on the level to maintain player interest. According to "Designing the World of The Witcher 3" (Noclip, 2017), "We found out that player is focused on stuff which we produce, like every forty seconds". Because of this, I decided every 30-40 seconds there should be something to see, whether it's interactable or a cool floating rock or a statue unique to that area of the cave for example.

Malady in Bree

Area 1-Forest

? 3
? 2
? 4

Blockage

Cave

? - Observations
1 - Scratch Marks
2 - Blood Pooling
3 - Dead Body
4 - Merchant's Looking Glass
- Forest Path

Area 2 - Cave

? 2
? 1
? 4
? 6
? 7
? 3
? 5
? 6
? 8

Olimar's Tower

? - Observations
1 - Beast's Den
2 - Writhing
3 - Wriggles
4 - Archibald (Necromancer)
5 - Worker Graves
6 - Crystals
7 - Cave Exit
8 - Tower entrance
- Main Road
- River

Research and Design

Journal Design and Research

Return of the Obra Dinn (Pope, 2018) features a book which the player uses to catalogue the fates of the Obra Dinn's crew and passengers.
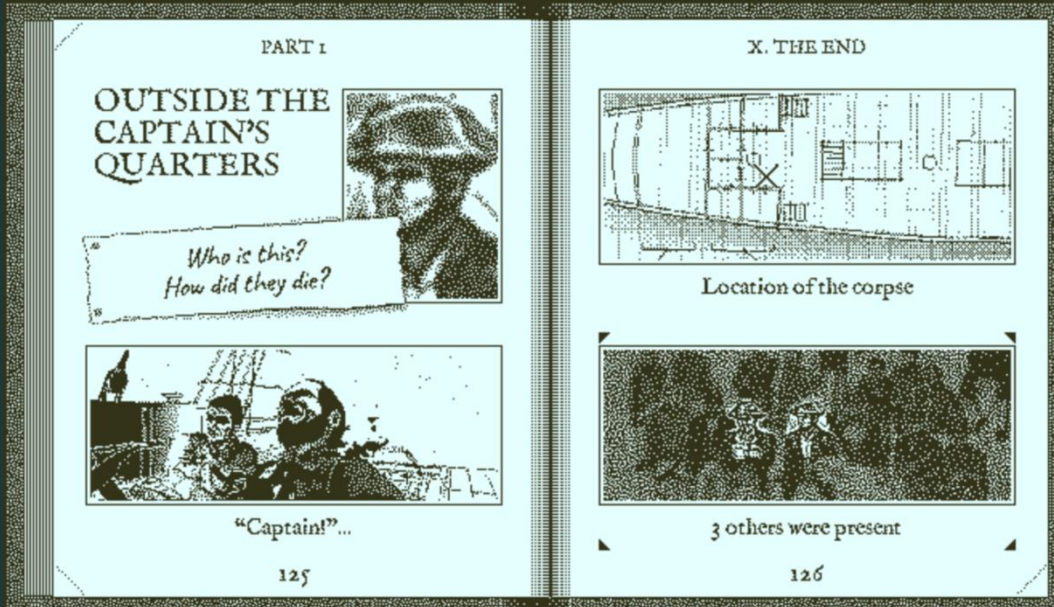
I designed a book for my game, it similarly records any important information the player finds and helps keep track of the Narrative. My journal will feature empty pages at the beginning of the game, these empty pages are still visible and hint to the player how many clues they have yet to find.
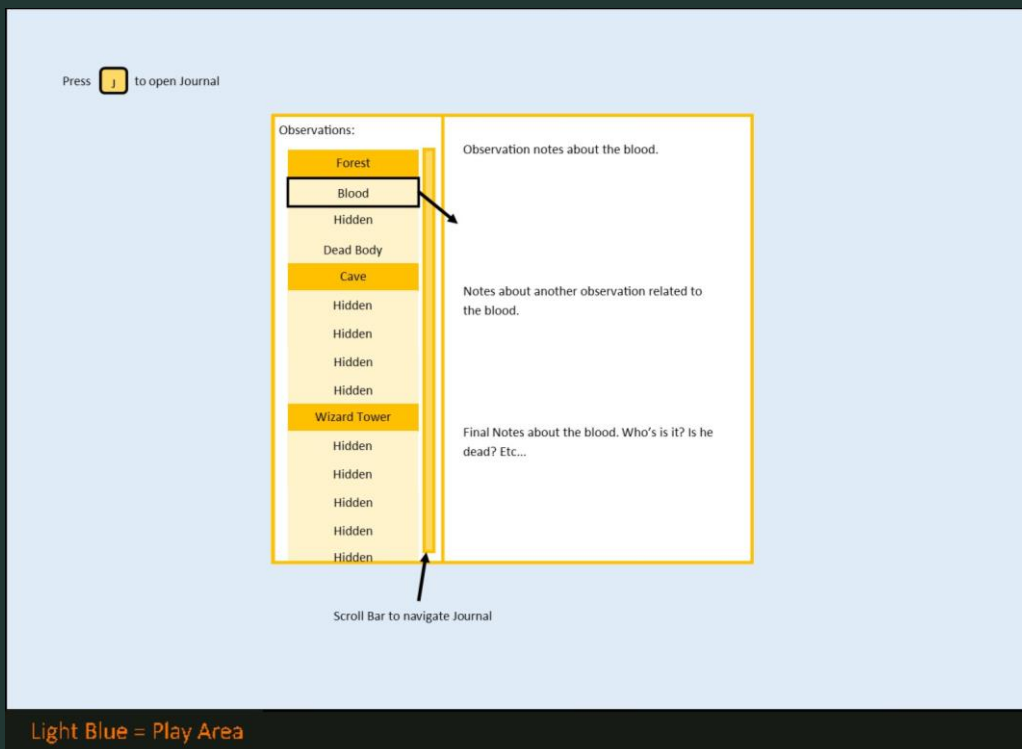
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As you explore the environment and find new clues, pages in the journal will start to fill out. To fully fill out each page the player might have to find multiple clues first to see the whole picture.

Observations:

- Forest
- Large Beast
- Fresh Blood
- Dead Body
- Looking Glass
- Cave
- Hidden
- Hidden

I found a looking glass in a Merchant's Trunk. I wonder why this was the only item he was carrying? (Hold MB2 to use the Looking Glass at a dead body)

The Glass must have belonged to the dead merchant in the forest. Perhaps it's pertinent to what happened in the village?
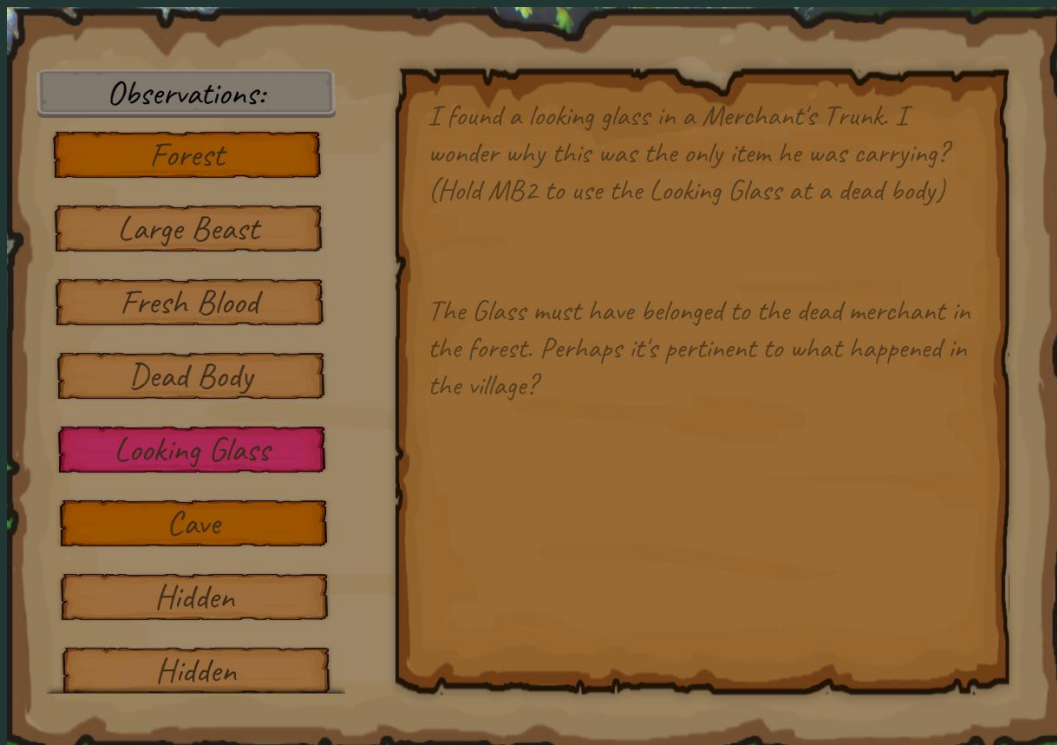
(A journal page, partially filled out)

Observations:

- Forest
- Large Beast
- Fresh Blood
- Dead Body
- Looking Glass
- Cave
- Hidden
- Hidden

I found fresh blood pooling on the forest floor. Someone must have had an accident... an attack, maybe?

I found large scratch marks on a tree nearby. Likely the cause of the blood nearby.

The Man's body was nearby. He appears to be some kind of merchant and died recently. Cause of death appears to be blood loss, the beast that attacked him didn't want to finish the job?

(A journal page, fully filled out)

Interaction Design and Research

Disco Elysium (ZA/UM, 2019) uses interacting with the environment as a mechanic to add environmental storytelling to its world. It does this through non-diegetic circles in the world space which show what you can interact with.

Walking up to these circles and pressing the interact button will display some text about that thing, regardless of how small or insignificant it seems at the time. This mainly just helps maintain interest and provides player agency during any form gameplay.

Interaction Design and Research

Malady in Bree

In Malady in Bree, the world is filled with different forms of clues from wagons of rocks to dead bodies. Anything pertinent to the player's investigation is interactable and anything not relevant is not.

The player can afford to know what is and is not interactable because of a slightly emissive firefly particle effect that flies around all the clues the player can interact with. The player will also see a non-diegetic interaction prompt when they get close enough. This worked perfectly although later down the line I found there was a small problem with this approach.

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Return of the Obra Dinn also features an interaction mechanic in the form of a pocket watch which you receive at the very beginning of the game. The watch opens an on pressing right click, allows the player to hear and witness a person's last moment.
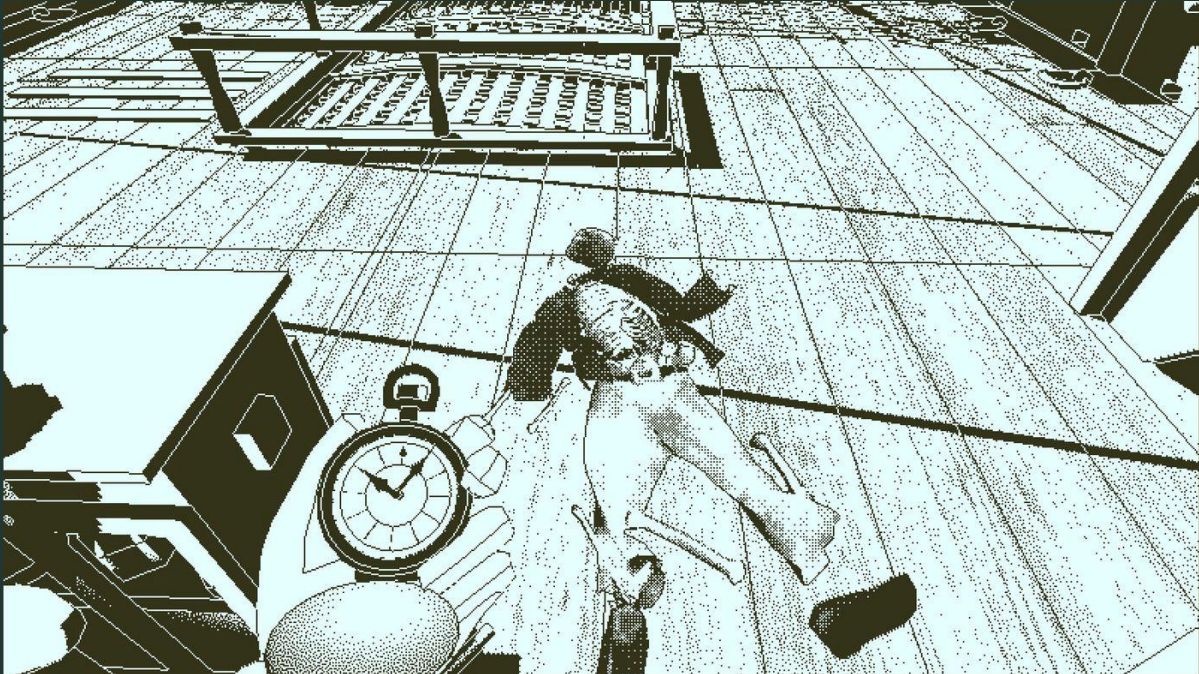
In Malady in Bree, like how the player can interact with clues where they see fireflies, they can also find a spyglass which when used on dead bodies which are all presented as skeletal remains will reveal how that person died and write it down in the journal. Other than only being able to investigate skeletons, this system uses the same fireflies as normal interactions.

Critical Path and Player Affordance

The critical path is the main path from point A to point B in a level. A player doing the minimum amount of exploration would follow this path and it should still have enough to see and do to allow that player to understand the world and its mechanics. The player needs enough affordance on this critical path to know how to use each mechanic in the game and to be capable of learning the basics of the story. This is primarily why the forest area is so linear compared to the rest of the game.

Other forms of affordance are present throughout the game, both in diegetic form such as the fireflies that are present around interactable objects and non-diegetic things like a prompt to press E to interact or J to open the journal.

Lighting Design and Leading Lines

Lighting was important for presenting the level and leading the player through it. I ended up using certain techniques such as the direction of the sun light to make the natural shadows in the forest point towards the cave. These shadows form leading lines that direct the player.

The cave worked slightly differently and was a lot of fun to experiment with. I wanted the cave to have a dark blue hue and heavy fog so that I can use the orange glowing mushrooms in one of my asset packs or create my own gold lights for lamps which will stand out greatly and guide the player away from the less lit dark areas.

A third technique used in some areas is using meshes alongside the lighting and the volumetric fog to encourage the player to go a certain direction. The image below is from the main road and the area to the right is very open whereas the path has a small rock wall and less light. The right side also has a plank to help suggest that a player could jump down here, all of this tells the player to not proceed towards the tower at the end of the road until they find what ever is below them.

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Production

Interaction Production

Having two mechanics in my game that were similar (Interacting and Investigating dead bodies) was a tricky dilemma. The player can always interact with objects around the world from the beginning, but investigations can only be done when the player finds the looking glass in the forest.

In retrospect, I don't think this was the best way to do this. Instead, I believe if I made it so any investigation cutscenes just occurred after interacting with objects (once the player has the looking glass) the player would have an easier time finding all the information for their journal.

A pile of bones, something or someone's been messing with them.

Examples of an interaction (Top) and an investigation (Bottom)

*Shoo Sir Loam, Wriggles can't swim go eat him! Writhing smells bad... No! *Screams**

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Subtitles and Accessibility

The subtitles in Malady in Bree are important for player accessibility. Some players might be deaf or just hearing impaired and other players might be more social and stream the game to their friends and struggle to follow the audio because of that.

The subtitle look went through a few changes, initially being quite blocky and with a big outline and then using a smaller font with no outline which really made it difficult to read in front of certain surfaces. Eventually I settled for a font more consistent with the other font used in the journal while still featuring a slightly less obvious outline to help it stand out.

Beneath you can see iterations 1 through 3 of my subtitles.

Tutorialising Interactions

The forest area in my game serves to introduce these interact mechanics regardless of the player outcome. Here we see two scenarios in which the player does and doesn't find the body in the forest. I have designed the game so that the player will always be introduced to the important mechanic without having to place every important object on the critical path.
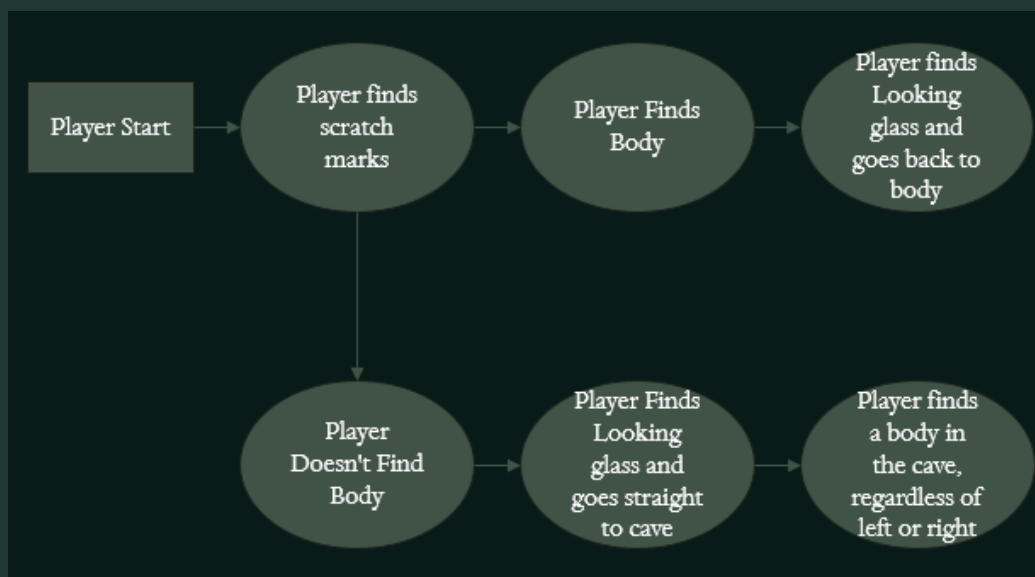
The only downside is both scenarios assume the player checks the journal and reads about the looking glass. Ideally, each time the player learns something new it would play a jingle and each updated page in the book would be marked by an icon such as an exclamation mark.

Journal Production

The journal was mostly a UI challenge to implement, and while it was fair simple to design the UI for the journal and figure out how it would work, I wasn't initially sure on how to implement it and doing so took the good part of a week.
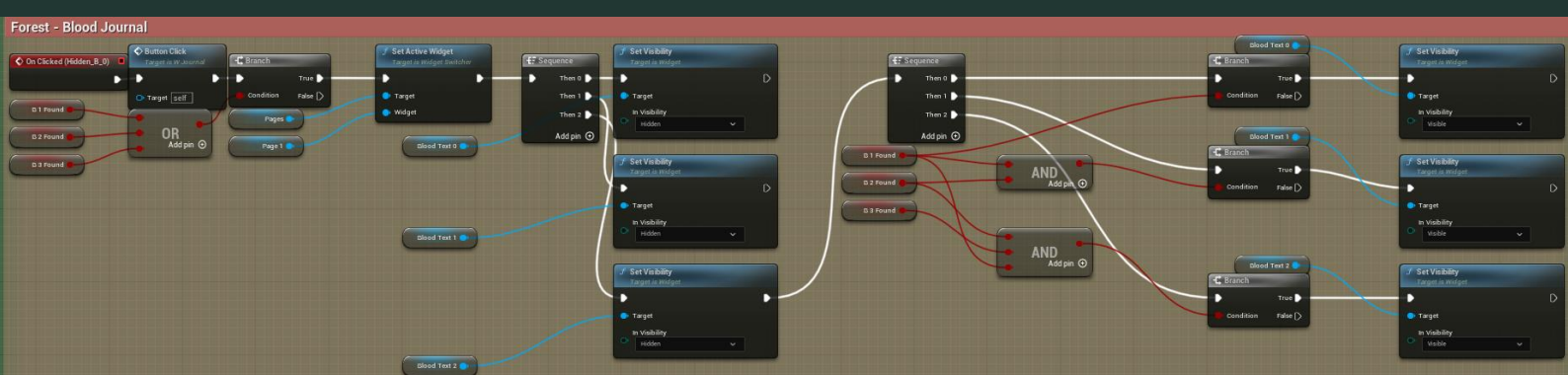
Creating the journal made great use of the Unreal Engine's widget switchers to swap between different pages. The rest of the journal blueprint was essentially Boolean logic to tell the journal what clues the player has found or not to update the journal accordingly.

Each page has its own box in the blueprint like shown in the screenshot, I don't believe this was the best way to program it and it taught me to always use proper naming conventions as this caused me the most bugs to fix down the line!

Audio Production

I wanted to add voice acting to my game like other narrative games like disco Elysium or Obra Dinn. This was an interesting challenge for me as I'd never organised actual voice acting for a game before, but I used a program called audacity before so all I had to do was find a good pipeline for recording and editing voices and find some voice actors.

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All the voice acting for my game was mixed in Audacity (Dannenberg, 2000) and anything recorded by me followed this pipeline:

- *Compressor*

- *Bass and Treble boost*

- *Normalise*

- *Noise reduction (where necessary)*

- *De-Esser (Custom plugin for audacity)* (Paul_L, 2014)

- *Adjust pitch (If necessary for the voice)*

- *Reverb (For any cave sounds or ambiance)*

- *Normalise*

- *Final volume adjustments*

Instead of recording my own sound effects I sourced them from various sources. (Appendix C).

Main Menu Production

At first, creating the main menu was purely out of necessity so I could easily add a quit button and an intro cutscene. UI assets were all sourced from Kenney (Kenney, 2023) and itch.io (KanekiZLF, 2023).
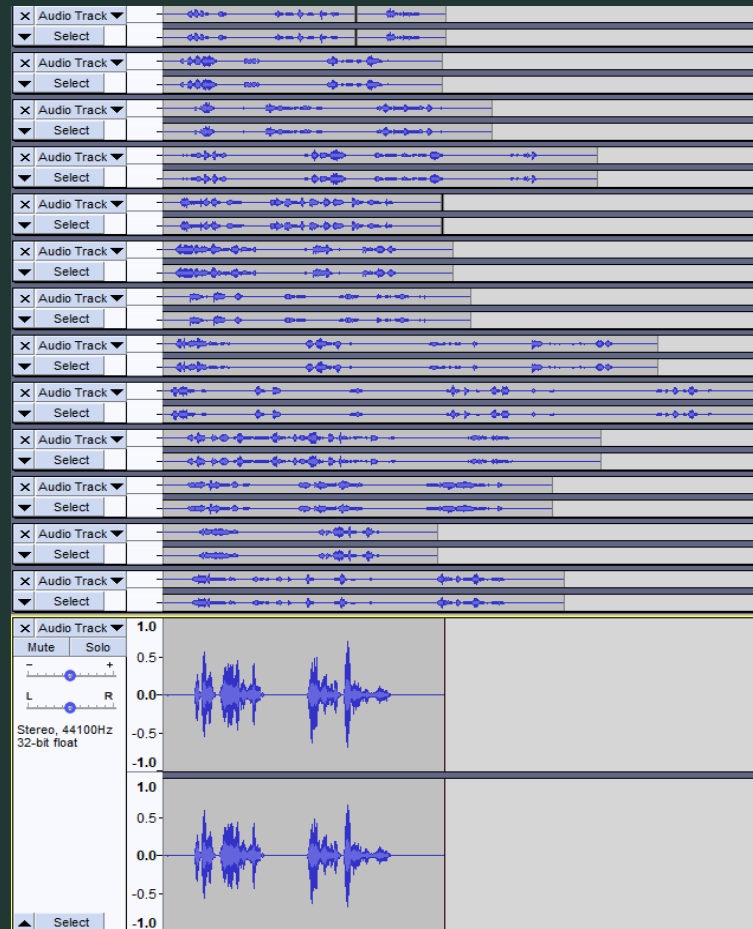
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(Version 1 of the menu)

In later iterations, the main menu background would be replaced with a cinematic camera and the font would change from the old journal font. Other changes like shifting the buttons and changing camera bounds also helped put this together.

(Version 2 of the menu)

(Version 3 of the menu)

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(Final Version of the menu)

Making the forest

The forest area started out as a very basic sketch before I jumped into engine. My focus here was using a spline to create the pathway which would lead through the forest, so I never made a full blockout of the area.
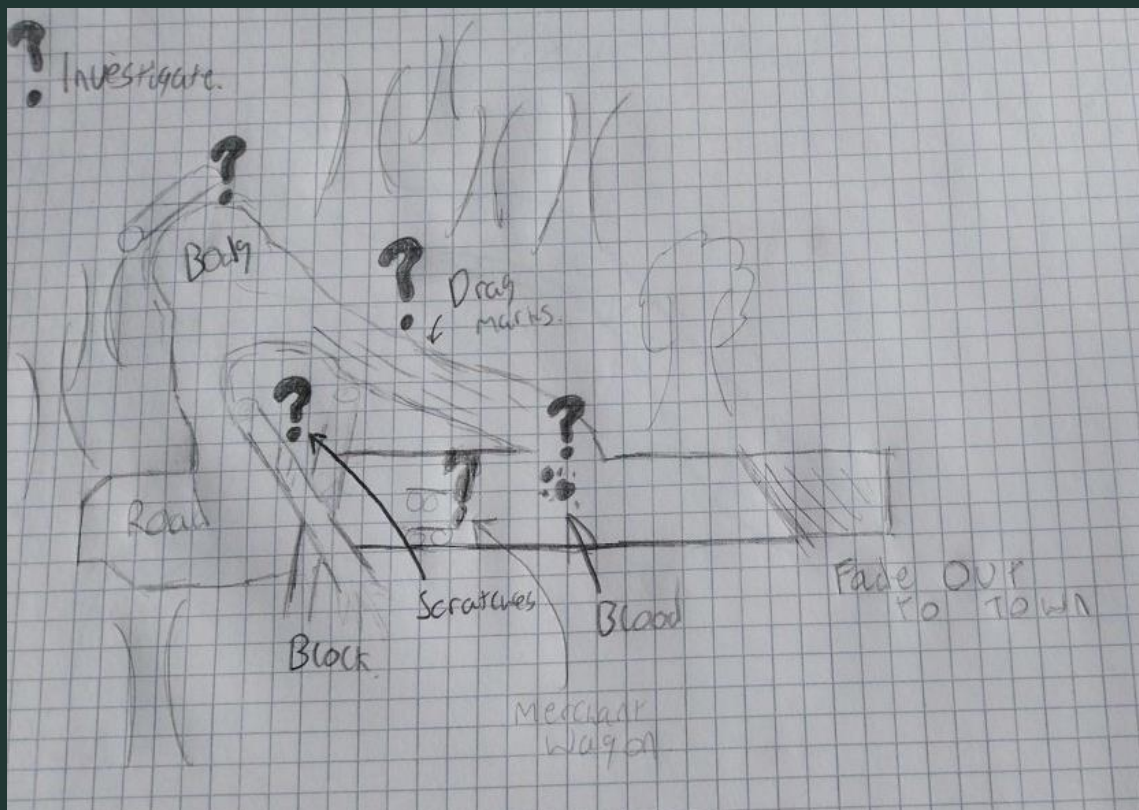
(Pen and paper map of the forest)

(Top-down view of the forest with a spline path)

(Finished forest and background landscape)

The most important parts when creating the forest was creating that feeling of exploration while teaching the player about the game. Having the player walk off the main path teaches them early that exploring off the beaten path will reward them. All the assets used for the forest and landscape are from the Dreamscape stylized environment asset pack (Polyart, 2022) from the Unreal Engine asset store.

Making the cave and tower

Unlike the forest area, the cave did start with a full blockout. This was mainly to help me test how far the walk is between each of the points of interest. During this time, I also started adding meshes to the cave with the help of two asset packs from the unreal marketplace (Sychov, 2018) (Rutkovskyi, 2021).
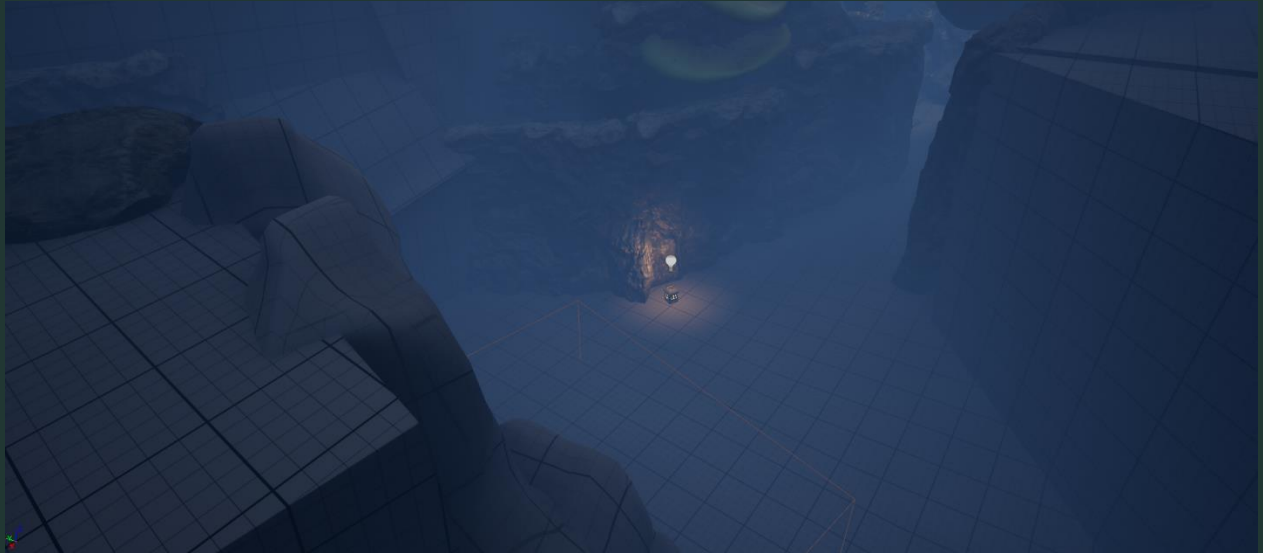
Looking back, I think that not all of these meshes look very good together and perhaps using two asset packs was a poor choice because of that. I must also note that the style of the cave's interior and the outside areas vary quite a bit in style. The tower was created from the same asset pack as the forest and a such looks more stylised than most of the cave.

Making the cave and tower

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Post Production

Testing and Iterations

Testing proved to be one of the most important aspects of creating Malady in Bree. In my first playtest (see Appendix A1) it became obvious that the player had some misconceptions about certain narrative details, and I made the appropriate changes afterwards (see Appendix B1). Following these changes, my second and third tests (see Appendix A2) got progressively more positive with both changelogs (see Appendix B2) mostly featuring bug fixes and polish rather than major changes like major design additions like the main menu and changes to the level geometry.

Evaluation

Reflecting on my project as a whole, I believe while I could have done some more thorough research specifically on cave geometry and level design that my pre-production planning helped me stay organised during the project specifically thanks to forming and following my Gantt chart early on. I wish I had spent less time on the cave blockout and meshing as this likely would have allowed me to begin testing perhaps a couple weeks earlier and given me more time for polish on the game. A limiting factor for me was the free assets in the unreal marketplace and while I do think some of the assets especially in the cave area clash poorly there was only so much, I could do to remedy this without reading out of the bounds of my project, I also believe that the lighting set up in the cave does a lot to help this for the time being. There was some feedback I never found the time to act on which I believe I would have been able to again if I spent less time on meshing, additions that bat visual effects to help guide the player similar to the fireflies and add more ambience to the cave would have gone a long way.

Regardless I'm happy with my project as I believe my level also succeeds in following the "40 second rule" which I highlighted in my research from The Witcher 3 and meets the design brief very well and through testing my game, I believe the narrative I have created and told through this environment is intriguing and entertaining to explore.

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Appendix

Appendix A1.

Questionnaire results from the first game test.

RESEARCH PROJECT QUESTIONS

Title of Project: Spatial Storytelling

Question 1. Did you make it to the end of the game demo?

Yes.

Question 2. Were there any parts of the demo that took you a while to get past or that you didn't quite understand?

The controls for Spyglass and Journal were unclear, and while the Journal does provide an explanation, that is not immediately obvious.

Question 3. Were you comfortable with the controls in the demo? Would you change anything regarding the controls?

The controls themselves are comfortable, despite being not explained to the player.

Question 4. Did any of the story in the demo not make sense to you? Do you feel like you missed any crucial details?

I believe I understand the plot, although it is clearly meant to be somewhat mysterious.

Question 5. With as many words as you like, can you try and tell me a rough synopsis of the narrative in the demo? If you're not sure just write what you do know here.

Our protagonist is investigating a beast attack and unravels the following sequence of events by finding a mysterious spyglass in a crate that a merchant dropped while fleeing for his life.

A wizard, Oswold, built a tower in a cave full of mysterious crystals. He hired Miners to extract them, but the work was dangerous, causing many deaths among the miners. For uncertain reasons, adventurers went to stop the Wizard, one among them dying in a fall, only to find the wizard frail and emaciated from exposure to the crystals.

Later, a Necromancer took up residence in the caves, using the corpses to form two ghouls, one of which named Writhing. The Necromancer summoned a hound called Sir Loam for wicked purposes, but the beast killed the Necromancer, causing the Ghouls to die in the cave river.

Sir Loam hunted and killed a merchant, and has been terrorising the village. You were sent to investigate it, and see the signs of its aftermath, but not the beast itself.

Appendix A2.

Questionnaire results from the second and third game test.

RESEARCH PROJECT QUESTIONS (Second player test)

Title of Project: Spatial Storytelling

Question 1. Did you make it to the end of the game demo?

yes!

Question 2. Were there any parts of the demo that took you a while to get past or that you didn't quite understand?

Nothing felt like it took too long to find, anything that took me a while wasnt too hidden that it wasnt fun to look for. Despite knowing the journal was there, it took me a while to remember to read it to find out about everything and I had to go back at times to see if I could use the magic glass on anything else. The yellow flies helped with that quite a bit though.

Question 3. Were you comfortable with the controls in the demo? Would you change anything regarding the controls?

I had no problem with the controls really other than sometimes I wish I could cancel the zoom in on bodies and other times it does cancel.

Question 4. Did any of the story in the demo not make sense to you? Do you feel like you missed any crucial details?

I think I understand the story, it doesn't feel like I missed anything.

Question 5. With as many words as you like, can you try and tell me a rough synopsis of the narrative in the demo? If you're not sure just write what you do know here.

To begin with, a merchant fleeing the wizard after robbing him of an mgaical looking glass gets attack by an undead beast presumably unless there were two beasts one in the cave one in the forest. The man gets away but bleeds out and dies after abandoning his wagon. The large cave that connects the road to the village was actually used to dig some kind of crystal which seems valuable to the wizard but was also what killed him. Not only the wizard but many workers in the cave died either from the crystals, the illness that seems to be going around or the beast dead or alive. Regardless, the cause of death must have made the workers decide to abandon the wizard after also finding him mostly dead and then destroy the entrance to the cave maybe to keep something inside it. Also there was a necromancer in the cave, he must have been hiding around the area when the workers started dieing as if the beast killed the merchant then technically the necromancer is to blame - he also mentioned moving bodies, possibly the bodies of some of the workers who died in the cave?

Anyway the player makes it to the end where the cave meets the village but it's blocked, and one of the men who killed the wizard seems to have gotten ill and collapsed down the stairs so maybe the crystals infect people with the illness or maybe the illness is just very contagious. Maybe it's both as well.

Appendix B1.

Changelog following the first player test of Malady in Bree.

- Added a main menu.
- Added a quit button to the main menu.
- Added a short cutscene that plays the first time a player presses the play button.
- Moved the "Crystal" and "Cave Exit" journal entries to the "Cave" section of the book.
- Fixed 2 wall collisions in the cave to prevent them from displacing streetlamps at a strange angle.
- Made alterations to the path in the forest area to hide the blood evidence slightly from the player spawn point and to make the body more obvious.
- Added instructions to use the Looking Glass on the Looking Glass page in the journal.
- Added a prompt to open the journal after finding the scratch marks for the first time.
- Added a small rockfall on the main road, framing the large area a bit better for the player.

Appendix B2.

Changelog following the second player test of Malady in Bree.

- Added a camera zoom when you investigate a body.

- Removed the spyglass to save time instead of trying to make the animation and perspective look decent.
- Fixed many more poor collisions on rock meshes.
- Added some more clutter to areas of the cave that really need it.
- Added some cool Boolean logic to anybody blueprints so you can only interact and investigate each body once per body.
- Fixed an issue causing the intro cutscene to play every time you press the play button in packaged versions of the game.

Changelog following the third player test of Malady in Bree.

- Fixed an issue causing low frame rates on high end computers.
- Fixed an issue causing the Crystal button to update the wizard journal page and vice versa.
- Increased the volume on a couple of the investigation dialogues such as the merchant.
- Added a bone rattle sound to the bones in front of the beast's den.
- Added more detail to the cave construction area.
- Updated subtitles to better match the voice actor's words.
- Removed wooden footstep sounds from small splinters of wood that would not realistically make that sound.
- Removed grass from inside the merchant's chest.
- Fixed a bug allowing certain UI elements such as the journal to remain open after the player opens the main menu.

Appendix C

External resources used for development and research.

Sonniss GDC Audio vault (Sonniss, 2015), this website features a huge vault of sounds for various uses. Most of the sound effects sourced for my game are from here.

Footstep sounds (Dryoma, 2023) from itch.io.

Bone Rattle sound (NoSoupForYou, 2024) for the cave den easter egg from Voicemod.