Executive Summary

Game: Lume & Fade

Team: TOFU Games

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Overview

- Gameplay: Side-scroller platformer adventure game
- Key Features: World switching and engaging story
- Win Conditions:
    - Reach the end of the level and defeat the boss
    - Defeat all three bosses
    - Collect all gems throughout all levels
- Genre and Important Influences: Fantasy. Super Paper Mario inspired the Switching mechanic.
- Background Story Outline:
    - Rynn and Cur, the main characters, have known each other for a long time. They have worked together and have developed a strong friendship.
    - Rynn and Cur both fall into a depressive and unmotivated state, which creates the shadow world of Fade.
    - Separately, they appear in Fade and realize they are trapped. Once together, they try to escape Lume.
    - They traverse through the world of Fade, being able to switch back into Lume due to their close ties to that world. With this ability, they are able to overcome their battles and regain hope and motivation
    - They battle important memories of Rynn's background, as they work their way to the Heart of the World (of Fade).
    - In the end, depending on the number of gems the player has collected, both Rynn and Cur escape Fade. Otherwise, only Cur returns to Lume.
- Art Design:
    - Fantasy/forest landscapes
    - Cartoon style
    - Fantasy character design
    - Fictional monster design
    - High resolution and fully rendered artwork
- Technical Platform:
    - Unity
    - Targeted towards PC platforms
    - C#

Game Specification

Game Overview

Philosophy

Philosophical point #1

Our game aims to be original and exciting to play through the creation of 2 alternative universes that will make the player feel as though he or she has entered into the world of Lume and Fade and is truly fighting for what their character, Cur, believes in only to realize that ultimately there is no right or wrong answer. The game will put a heavy emphasis on artwork and storyline to provide an engaging and thought-provoking experience.

Philosophical point #2

Our game will be available to play on PC. The reason for this is because it is easier to develop for PC games due to the time constraints on this project. We also believe that creating a side-scroller for this platform helps us put together our pre-existing knowledge of what we know so far of how to make and develop games.

Philosophical point #3

We want to have people enjoy playing our game through solving environmental puzzles while enjoying the overall story at the same time. Our goal is to have the player feel connected with the characters and feel empathy for the situations they face.

Common Questions

What is the game?

Lume and Fade is a 2D side-scroller platformer game. The main characters of the game are Cur and Rynn, however, only Cur is playable. Both characters are trying to escape Fade, a world they are both trapped in due to unfortunate events. Throughout the journey, Cur is able to switch back and forth between Lume and Fade, allowing him and Rynn to traverse through environmental obstacles. In between levels, Cur and Rynn's friendship will be further established.

Why create this game?

This game was created for the purpose of the class Informatics 125/Computer Science 113. Beyond this reason, our team's personal reason for creating this game was because we wanted something simple, but fun to work with for the period of 10 weeks. A cute and adventurous side scroller was our best choice.

Where does the game take place?

The game takes place in an alternate universe where there are two worlds: Lume and Fade. The world of Lume tends to be illuminated in warm colors. Fade is an alternate world that looks almost identical to the world of Lume but has different environmental elements and living species. Fade tends to have darker features in terms of the color of the world, monsters and atmospherical conditions. Fade will be the world where the majority of the game is played.

What do I control?

The player will control a character named Cur that is unique to this world. They are neither human nor animal, but a plant like species known as a Plark.

How many characters do I control?

The player is able to control one character which is Cur. Cur will be aided by a companion named Rynn throughout the game.

What is the main focus?

The main focus of the game is to get both Rynn and Cur into a happier state and back to Lume. Both characters have slipped into a slump, which led them to appear in Fade. The goal has become to work through obstacles together to get out.

Alternatively, players will be able to collect gems scattered throughout the level. If all gems within the entire game are collected, an alternate ending occurs. This is an alternate purpose players may follow, but it is not the primary focus.

What's different?

What's different about our game is the fact that it incorporates a fun gameplay that involves a player and an original and symbolic story that will leave the player with an ethical dilemma at the end. The storyline, characters, visuals and music are original and unlike any other game.

Feature Set

General Features

- Original storyline, characters and sound
- High quality artwork
- 2D Graphics
- Side-Scrolling exploration
- Environmental Puzzles
- Unique set of monsters

Gameplay

- Players will be able to switch between two worlds.
- Tasks to solve environmental puzzles in order to progress through levels.
- Players will also have the ability to jump and attack.
- Survive and attack enemies to progress through the levels.
- Collection of gems

The Game World

Overview

The game world is set in a fictional universe with two worlds called Lume and Fade. Both worlds are set in a forest-type setting where sentient beings called Plarks and Squox coexist. There are other creatures or animals that also exist with these beings, but they are not sentient. Lume is what can be considered the more standard world, without any elements that would be considered unique to the world other than its primary life force, known as Luminscence. The world of Fade is a world created by both Rynn and Cur's depressive state. Fade will have stronger bonds to Rynn since his level of depression will be at a grander state. Both Rynn and Cur's emotional state will feed to the power of Fade.

World Switching

One of the main features of this game is the player's ability to switch between Lume and its alternate world Fade. The world's physics in the universe it resides in are not the same as ours in a sense that this universe contains different worlds. Both worlds will be very similar, however, Fade's power comes from the emotional state of Cur and Rynn.

World Gems

The existence of the world Fade is supported by life force gems that are powerful components that keep the fragments of reality together. Gems are found in fragmented pieces throughout both Lume and Fade because Fade is an alternative world to Lume. One of the main features in our game is gem collection, where the player collects fragments of gems to complete an entire gem. The player must collect gems in order to return to their world, Lume. These gem fragments also give the player extra lives throughout the game.

The Physical World

Overview

Lume and Fade are worlds consisted mainly of forests. Many forest dwelling creatures live among both worlds. A variety of plants and trees grow within the lands. Some characteristics of the world even have special capabilities that natives to the land can use to their benefit. Grass grows in abundance in both worlds.

Both worlds are very similar for the most part. Some minor physical differences exist. Aesthetically, they are the same but the colors differ.

Color

Lume consists of warm and earthy colors. These colors were chosen to make it look like a natural and lively place. Fade's world is consisted of cooler colors. This was done to create a feeling between the two worlds that they are very similar, but a player can always tell which world they are in by the drastic change in color. Color choices of the world serve no other major purpose than to distinguish between the lighter world of Lume versus the darker world of Fade.

Key Locations

Great Tree

The Great Tree is both a location and the name of the first level boss. The Great Tree is a tree that is twice as big as the normal trees found throughout the forests of Fade. It also has facial features of two dark round oval eyes and a mouth. The Great Tree is located at the end of level 1 and can attack by spitting pellets at its enemies. While the Great Tree is normally friendly to a passerby, it guards half the fragment gems needed to complete a whole gem and will attack relentlessly when threatened.

Cave of Shadows

The Cave of Shadows is the location of the second level boss where the shadows within the cave are powerful enough to sense a person's distress and take the form of that distress as a protection mechanism. Within the cave hides half the amount of gem fragments needed to complete a whole gem.

Heart of the World

The Heart of the World is a mystic forest hidden and surrounded by pillars of rock found at the center of Fade. The path into the Heart of the World is only revealed when the player has collected and completed all 3 life force gems of the world, granting them access into the center of Fade. It is normally secretly hidden and simply looks like a giant pile of rubble to those that do not have the gems. There is no other way to enter the Heart of the World.

While the entrance cannot be seen until all three gems have been gathered, the Heart of the World is also guarded by the third and final boss. Once it has been defeated, the pile of rubble will assemble itself into a stone archway marking the entrance into the mystic forest. Within the mystic forest is a stoned pathway that can be followed to lead the player straight into the Forbidden Tree.

The Forbidden Tree

The Forbidden Tree acts as the portal entrance between the world of Lume and Fade. If all of the gems are collected and brought through the Forbidden Tree into the world of Lume, the world Fade will destroy itself and fade entirely from existence. The Forbidden Tree is the biggest tree in the world and illuminates a bright yellow glow at the center of the Heart of the World.

Travel

 Standard keyboard controls will be implemented to allow the player to move back and forth, jump, attack and switch between the worlds of Lume and Fade. The player will be able to travel throughout the world either on ground, across vines or on tree branches. The player will be urged to avoid or attack monsters, as well as to navigate efficiently in order to collect as many gems as possible, which may require jumping, moving objects, climbing, switching between worlds, and other actions of that nature.

Scale

 The scale that represents the game world is an island. This means that the world that the player traverses through is as big as an island. This scaling is big enough for the characters, story wise, for them to travel for days or even weeks at a time. The scaling is also split into several levels which should only take the player a couple of hours to finish the entire set.

Objects

Treated Soil

Heals Cur when he is standing over it. It looks like a patch of moist dirt that will have a somewhat sparkle to it. This will be the only way players will be able to heal Cur.

Sap

Will be placed around the levels as a hazard Cur must avoid. When caught in sap, Cur will move slowly and be unable to jump high. Sap will be orange in color and look similar to a thick glob of honey.

Mushroom Spring

Propel Cur upward, allowing him to reach higher locations. They look similar to Amanita muscaria, however, the primary color of the shroom would be yellow, while the spots on it would be grape purple. Ideally, the mushroom spring would have somewhat of a spring animation.

Vines

Allows Cur to climb up to places up high. Cur can also climb across several vines, allowing him to cross large gaps that would otherwise be impossible. They are slender in look and green in color.

Beanstalk

Look and function similar to vines, however, they have one distinctive feature. They are much larger in size. Cur can climb through a wider area, unlike vines which cannot be climbed horizontally without having another vine next to it.

Floating Tiles

Platforms that Cur can jump to and stand safely on. They look like a chunk of the ground was ripped off of the planet. A layer of grass, dirt, and roots can be seen within them. Floating tiles can be used as shelter from acid rain.

Gem Fragments

Serve as the primary object to collect in the game. Each level will a have specific number of gem fragments. At the end of each level, the fragments will form into a completed gem.

Thorns

A hazard Cur can encounter. Touching them will damage Cur. The primary color of the thorn's stem will be brown. The color of the actual thorns will be red. Cur will die instantly if he touches the thorns.

Spider Web

Bullet like damaging object. They are shot by the Lunar Spiders. Initially, the shot looks like white, silky web, but it quickly turns into a ball of web. Once shot, the spider web will hurl forward until it collides with a wall, Cur, or moves out of the viewable screen. When Cur makes contact with the object, he will lose 1 life point.

Pellets

Bullet-like damaging object that is shot out by the first boss, The Grand Tree. It is the main form of attack for the first boss. They are brown and resemble a seed. Taking a hit from one will result in 1 life point lost from Cur.

Memory Orb

A spherical like object that damages Cur. This will be one of the main forms of attack for the second boss. They are a bright golden color and have a bright shine. When memory orbs are summoned, they will bounce around the screen. Taking a hit from one will result in 1 life point lost from Cur.

Falling Trees and Branches

A hazardous object and condition that Cur can encounter as the world of Fade begins to collapse. Falling trees will begin to sway as a warning that they are unstable and branches will begin to fall, before their roots rip out of the ground completely and topple over on its side. If Cur gets hit by any branch, root or part

of a falling tree he will take 1 life point damage. If Cur finds himself completely crushed by a falling tree, they will die.

Acid Rain

A hazardous condition that Cur will encounter as he progresses further into the world of Fade. Acid rain will be dark purple and resemble normal rainfall in appearances, but standing or getting hit by the acid rain will cause Cur 1 life point. Acid rain works as an on and off hazard condition that starts every 15 seconds and lasts a duration of 3 seconds.

Lightning Storm

A hazardous condition that Cur will encounter as he progresses further into the world of Fade. During lightning storms, blue lightning bolts from the sky will strike any random spot on the map and take 1 life point away from Cur if he is hit. Before the lightning strikes, the sound of thunder in the game will be heard before any lightning appears on the map, giving the player a chance to prepare for it. Lightning will also produce a shadow in the air so that players can see the outline of it before it strikes.

Tornado

A hazard damage object that can spawn in certain areas within the game as Cur adventures further into the world of Fade. They can spawn and last a duration of 15 seconds in certain areas and permanently in other areas. Tornadoes can travel across platforms, but cannot reach any high places such as any platform that require more than one jump from Cur. Taking a hit from a tornado will cause Cur 1 life point.

Shelter

Components that will provide protection from certain hazardous conditions and will take the form of all platforms both moving and static. For example, Cur can take cover under any platforms to avoid getting hit by acid rain or lightning.

Weather

Depending on the location of the player in the game, certain parts of the world will have specific weather conditions that may deter the player or add to the atmosphere of the game. The atmospheric value of weather conditions in the game is to show the progress of the game and storyline. As the gems are collected throughout the levels, there will slowly be harsher weather conditions in the world of Fade to show that the world is collapsing and fading away due to the fact that the gems are what support Fade. Weather conditions in the game will include acid rain, lightning storms, and tornadoes that will begin with light variations, such as light acid rainfall to stormier conditions such as a combination of all three. These conditions will appear in certain areas of the forest and in some areas they will be on off conditions that last a certain amount of seconds every so often.

Day and Night

The world of Lume remains in permanent daylight at all times. There is no night mode within this world. In contrast, the world of Fade remains in permanent night at all times. There is no day mode within the world of Fade.

Time

We will have a time limit on how long a player can remain in Lume after switching over to it from Fade. A bar will be present near the top of the screen, indicating how much time the player has left before they are forcibly switched back over to Fade. Therefore, certain tasks that require the player to be in Lume will urge players to be quick on their feet, and use their time wisely. Time will not play any other role.

Rendering System

Overview

Our game will be rendered in 2D within Unity. All artwork or model assets will be made with digital art software and tablet hardware which will be then rendered towards the game.

2D Rendering

Our game will be rendered in 2D using Unity. The art assets will be rendered using this engine. All the artwork that will be used as models from spritesheets will be animated in Unity as well.

Camera

Overview

Camera will from a side view perspective. It will follow Cur around as he travels. When switching worlds, the camera will still focus onto cur. The camera will display everything as is, but with changes to the environment as the player switches worlds. This includes objects that appear or reappear in the environment and the palette change.

Camera Detail

The main camera that focuses on the player (Cur) will maintain the same side-view of Cur throughout the entire game.

Game Engine

Overview

The game will be run on Unity and will run all the basics our game needs in terms of how it functions.

Game Engine Detail #1

Unity will be able to generate the level design we created with all the assets displayed. It will generate the player at the beginning of the level and will allow the player to control their character. Monsters will also spawn at various places throughout the level with each monster having their own ways to attack the player.

Collision Detection

Unity provides us with tools, such as 2D physics and the colliders associated with it. This makes it convenient and relatively easy for us to implement collision detection between the player (Cur) and the rest of the world.

The Levels

Overview

There are a total of 3 levels in the game of Lume and Fade. The design, layout, and storyline of each levels will be described in written form below. Each level will utilize the switching mechanic. All levels will also contain a total of 100 gems to collect. Each boss will hold 50 gems, while the other 50 will be scattered throughout the course.

Level #1

Setting

A natural forest with creatures of Lume and Fade.

Goal

Cur must explore and learn the dynamics of the world in terms of hazards, monsters, and begin collection of gem fragments on his way to the Great Tree. The Great Tree is the first of Rynn's past that must be overcome.

Gameplay

The first level acts as an introduction to the world and environment of the game for the player to get used to the controls, mechanics and elements found in the game.The player will have to jump on platforms and switch between worlds to get through the environmental layout and attack monsters whenever they are encountered. They will encounter checkpoints and learn of both healing soil and various hazards of the world (such as thorns).

Boss

The boss in the first level is located at the same location of Rynn's home from the world of Lume, the Great Tree. The Great Tree is both a location and a boss and has the ability to attack by shooting pellets at Cur. Each pellet posses the ability to do a damage of 1 life point and to defeat the Great Tree, it must be attacked 7 times.

Once defeated, The Great Tree will drop 50 gem fragments.

Level Layout

This level will be playable in a leisurely manner. Players can expect enemies such as the Lunar Spider and Sunpillar. Their will be several introductory ways on how the user should be applying the world switching mechanic. There will be

platforms that will require switching worlds mid jump in order for players to progress. This type of platforming is expected to force player to travel the world either horizontally or vertically. There will also be simple switching puzzle where players will have to reach lower levels of the stage. Players can also expect a beanstalk that they must climb to reach the Great Tree.

Storyline

The first level is where Cur begins to explore and learn more about the world of Fade and how it contrasts with his own world, Lume. As he battles through the level and encounters monsters, fighting along the side of Rynn helps him regain the hope and motivation to face his own battles. While Rynn is collecting the fragments in an effort to save Cur and return him back to Lume before he runs out of Luminescence and dies, Cur begins to realize that he is also helping Rynn on this journey. When they reach The Great Tree, Cur sees for the first time a glimpse into Rynn's emotional strife and begins to learn about what happened to him the many years ago when he first disappeared from Fade. The battle with the Great Tree symbolizes the first step to Rynn regaining hope and motivation as he is able to overcome a small part of what has always been troubling him, the memory of the home he shared with his mother. The home had always been a constant reminder of his mother and was an element that prevented him from truly longing to leave Fade and return to Lume. It is only with the help of Cur that Rynn is able to defeat the Great Tree, as he realizes that that there is still life outside of his loss and that he still has a caring friend even without his mother in his life.

Level #2

Setting

A forest with dying plants, trees, and natural life to show how Fade is slowly collapsing. Most of the level will be in the forest, with some parts and specifically near the end of the level, being increasingly more barren or filled with dried up plants and trees.

Goal

Reach the end of the level and collect the second gem. Cur and Rynn must find the Cave of Shadows where they have to defeat the shadows that represent the pain of Rynn's memories and retrieve the second gem.

Gameplay

The player will have to fight their way past different monsters and solve environmental obstacles to find their way to the Cave of Shadows. The player will then have to use their skills and timing to defeat the shadows. The player will have a 2 second window to attack the shadows when it pauses, but if the player misses they will get hit and lose a life point.

Boss

The boss in the second level is the shadows within the Cave of Shadows. The shadows are an abstract shape that do not have a true form. However, they are often described to be a glowy black ball or cloud with swirling black matter around it. The shadows have the power to sense a person's distress and attack its enemies with that distress factor as a protection mechanism against those trying to take the second gem.

In the game, for Cur and Rynn, the shadows take the form of Rynn's memories and attacks with bits and pieces of memories from the incident where Rynn had loss his mother. This attack is known as the shadows' Memory Orb Assault. This attack consists of orbs bouncing around the screen. Each time an orb hits Cur, a memory of that day replays around him in the cave as if he is reliving it. The shadows move by circling above Cur and then quickly swooping down to attack like a bird with its prey.

Once defeated, the shadows will drop 50 gem fragments.

Level Layout

The second level consists of the first hint of Fade becoming more unstable and collapsing through environmental and atmospherical changes. The first part of the second level will introduce the player to a forest with acid rain falling from the sky. Within this level, the player will encounter falling trees and branches, acid rain, lightning storms and tornadoes that will act as environmental hazards to the player. In order to survive the harsh conditions, the player must use their logical reasoning and skills to avoid each hazard while going through environmental obstacles and fighting against Mist Void monsters and Lunar Spiders. They must take cover under certain shelter platforms to shield themselves from the acid rain, strategically dodge tornadoes that have the ability to move between lower platforms and rely on quick reactions to avoid falling trees, branches and random strikes of lightning. Throughout the level, the player will also notice significant changes in the environment as the more they progress, the more natural life begins to die and the more the land begins to look barren.

One of the unique encounters in the second layout is an area where the player must apply sap onto Cur's hand to use it to climb their way up the environment. Certain areas on the tree or ground will contain sap that Cur can pick up. However, the sap can only last a certain amount of time, and thus if they find themselves running out of sap halfway through climbing up a tree without finding another source for the sap, they will fall back to the ground. The goal is to get past the sap needed area as fast as they can, but the challenge is that there will also be thorns along the area that they will have to maneuver past.

Storyline

The second level is like walking down memory lane for Rynn as their journey to the Cave of Shadows is where they will ultimately have to defeat the shadows. The shadows take the form of Rynn's memories to show that to get out of his slump, he must overcome those memories of the incident that has rendered him

there in the first place. With the help and encouragement of Cur, Rynn is able to overcome his memories and thus slowly regain hope. Cur realizes his hope and motivation derives from his ability to help his friend Rynn. It is during the Cave of Shadows that Cur learns about how Rynn's mother had died, which is where Cur finally finds out why Rynn had fallen into despair and became trapped in Fade.

Level #3

Setting

A barren wasteland that is beginning to Fade. Very little plant life is left since Fade has lost most of its power to remain a physical world.

Goal

Cur and Rynn must dash as quickly as possible to make it to the Heart of the World and complete the third and final gem. At Fade's current state, only the Heart of the World is completely physical, making it the only safe place to be.

Gameplay

The player must get through the level as quickly as possible. Players will have to think quickly on their feet in order to get through the level while solving small environmental puzzles to get to the goal. While a player is completely safe in Lume, when they return to Fade, if the physical world has disappeared where they are standing, players will fall immediately to their death.

Boss

The boss in the third and final level of the game will be the ghost of Rynn's mother. She will take 5 hits in total to defeat and will have two sets of attacks. Her first 3 life points will feature the first set of attacks. This set will consist of 3 attacks. She will use her tails to create a vortex of wind that will contain leaves. If Cur makes contact with the leaves, he will lose 1 life point. If Cur gets near her before she has left an opening for herself, she will use her claws to attack. Her final attack for this set is a charge attack, in which she dashes towards Cur. Players will need to avoid her when she dashes. She will have an opening right after she finishes her wind vortex attack.

Her second set of attacks will consist of 3 moves. Her first move will be the same charge attack move from her first set of attacks. The second move she will have is similar to the second boss, where she summons Memory Orbs to bounce around the screen. Her final attack will have her turn invisible for 5 seconds. The second before she attacks, her silhouette will appear. Players must act fast and switch to Lume to avoid the hit. If timed correctly, players will be able to switch back to Fade and hit her. If not, players will have to wait for the opportunity again.

Once she has been defeated, she will drop 50 gem fragments.

Level Layout

This level will require players to act quick. They will encounter large gaps they must traverse by climbing over vines. They can also expect areas where they must switch back and forth constantly between the two worlds where platforming several floating tiles will be required. An expected obstacle will be a dried up waterfall that players would have to work their way up to by switching between Lume and Fade. In this area, players can also expect Dusk Owls and Sol Pigeons who will try to push them off of platforms. Within some of the floating tiles, players can also expect sap to be on them. Rather than landing on these platforms, it would be best to avoid them and jump over it entirely. Spring mushrooms will also play a large role in this level. Players will be required to traverse a large area solely by hopping on various spring mushrooms. Due to the conditions of Fade, Spring Mushrooms will have a 1 time bounce effect. If a player fails to successfully navigate the Spring Mushrooms, they will have to start the section over. Right before reaching the Heart of the World, players will find themselves in a maze of thorns. They must carefully navigate through the maze, making sure that they do not jump too high or fall off of a platform. Players can expect Mist Void Monsters to inhabit these areas. Getting hit by their Nightmare Fog could make navigating the maze of thorns much more difficult.

Storyline

Rynn's mother will serve as the final hurdle Rynn must get over to move on. Defeating her will symbolize his ability to regain hope and motivation and remember his mother for the great Squox she was rather than mourn for her and blame himself for her death.

Defeating her will also lead the players to two possible endings. If the player collected all 300 fragments, scattered across the world and dropped by the bosses, both Rynn and Cur will be sent back to Lume, having completely fulfilled their purpose and fully gaining their spirits. If players are lacking any number of gems and thus meaning they have not recovered enough hope and motivation to return, Rynn will be forced to stay in Fade. At its current state, this would mean Rynn disappearing along with Fade. Cur by default would be sent to Lume because Rynn would not want his friend to die from a lack of Luminescence.

Game Characters

Overview

The game revolves around the story of two main characters: Cur and Rynn. The player is Cur and Rynn is the player's companion and guide. Both characters are of different species with unique and original characteristics.

Species

Cur is part of a species known as Plark from the world of Lume that needs Luminescence in order to survive. Plarks are a plant like species that resembles reptiles. Their physical appearance consist of leaves for hair that vary in color and a brown earthy bark-tone (skintone). They can expand the growth of their limbs which also act as weapons. Culturally, they are found wearing Eidoohs, a hoodie-like sweater.

Rynn is part of a species known as Squox that originates in the world of Lume. However, they are a very environmentally adaptable species unlike Plark that need Luminescence to live. Squox are a squirrel like fox with features of a bunny and claws that can be used for defensive purposes. They appear with various markings and coat colors that consist of different shades of white, cream, brown and black.

Both Plark and Squox are intelligent species that are generally peaceful creatures. They can communicate amongst each other through the language of Squarken.

Create a Character

It'll be up to the audience to associate with the characters however they desire. We are not providing a customization option as the player will only be able to play and control Cur throughout the game.

Character Characteristics

Cur is a simple character that is loyal, trusting, curious and gullible. Rynn is helpful, friendly and protective. Rynn values friendship above all and is willing to go to extremes at any cost, including sacrificing himself, for the safety of his friend.

Additional Characteristics

Cur

- Loves: Sunlight/Lume, having a good time, friendship, puzzles, shiny things, plants, animals
- Hates: Not having enough energy, being alone, negativity
- Needs: Luminescence, a good friend
- Wants: Positivity, security, love
- Secrets: Doesn't like showing others his negativity

Rynn

- Loves: Nature, climbing, his mother, trees, nuts
- Hates: Being alone, the loss of loved ones, facing his fears
- Needs: Someone to look up to, a sense of direction in life, good vibes
- Wants: Food, a good friend, his mom to come back

- Secrets: Carries on the guilt of leaving the people who cared about him since his imprisonment in Fade
- Rynn's mother carries an important role in the context of the story. His mother was a figure that he looked up to. She always took good care of him and was also very close. They were inseparable and Rynn's mother was a source of guidance to where Rynn needed to be in his life.

Character Dialogue

Cur:
- *"As long as I'm here... As long as I'm not dead... That's a reason why I shouldn't stop trying right?"*
- *"I'm not really good at anything, but if you still believe in me I'll keep going."*

Rynn:
- *"I remembered when hope was when I believed in a world that made me feel."*
- *"What do you do when you have nothing left?"*
- *"I guess this is the only shot we have. Don't guarantee that it'll go through though."*

Enemies and Monsters

The enemies and monsters in the game will all be unique and fictional creatures. There are different creatures the player can encounter with different attacks depending if the player is in the world of Lume or Fade. Monsters that originate from the world of Lume are all daytime creatures that tend to be of warm and light colors similar to the world itself. Monsters that originate from the world of Fade are all creatures of the night and tend to be more frightening in darker colors.

Sunpillar

Sunpillars originate from the world of Lume. The Sunpillar is representative of a caterpillar and appears in green and yellow shades with tints of pink. The sunpillar has dark oval eyes and two fang looking teeth. They usually appear friendly, but when threatened, Sunpillars can use their Poking attack which is when their entire body launches forward on their enemies. With the momentum of their body, they utilize the horn on their head to stab enemies in defense.

Sol Pigeon

Sol Pigeons originate from the world of Lume. As their name suggests, they are bright colored creatures that appear in orange and peach. They are very large feathery bird and have sharp gray colored beaks and talons. When provoked, they can defend themselves with their Pecking attack. They attack opponents by pecking with their beak. Taking an attack from a Sol Pigeon will result in 1 point of health lost, as well as a bump away from the Sol Pigeon.

Lunar Spider

Lunar Spiders originate from the world of Fade and can attack with a Web Shoot attack. The Web Shoot attack is when Lunar Spiders spit out sticky gray cobwebs on their opponents that are effective enough to get them stuck or hinder movement. This attack helps Lunar Spiders pin down their prey and give them the advantage to strike. Lunar Spiders have furry dark and light gray colored bodies with 6 brown hard shelled legs. They have tints of magenta on their face with 6 clear colored eyes and long furry curved ears that stand up.

Dusk Owl
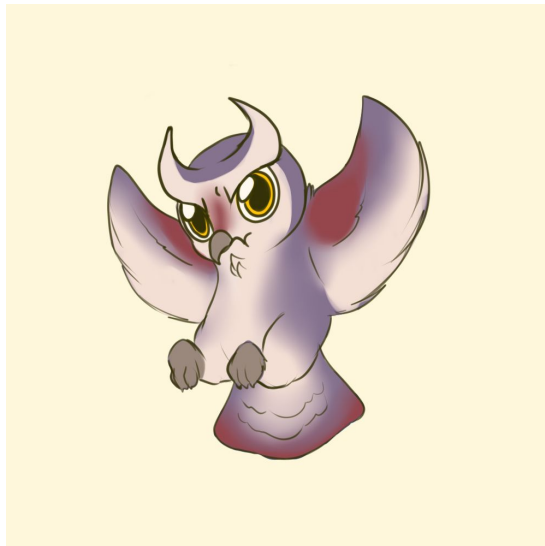
Dusk Owls originate from the world of Fade and look like owls, but are more unique in terms of colors. Dusk Owls come in a beautiful mirage of indigo, magenta, and light gray colors with dark gray beaks and talons. They have large golden yellow eyes and a fierce stare to help them stalk their prey. They can attack with their Talon Pierce attack. This attack consists of their talons clawing onto prey. They pierce into the player this way to effectively damage them.

Mist Void Monster

Mist Void Monsters originate from the world of Fade and can attack with their terrifying and dangerous Nightmare Fog. Nightmare Fog can blind the player momentarily by protruding the air with a dark and poisonous fog. This gives them the advantage against the player by hindering them of their movement to gain up on them and strike. MistVoid Monsters are dark midnight blue and look like medium sized reptiles. They have four claw like legs, a long thick tail, a clamp like mouth and pitch black eyes that look like small dark holes. They are described to be creatures of nightmares as they look as if they have no souls.

User Interface

Overview

Our user interface will be fairly simple to navigate. It will consist of text that are easy to read and scan through. The interface won't take up too much of the screen and will consist of only a few elements such as health and the number of collected gems. There will be also an end and pause screen integrated.

User Interface Detail #1

The fonts and text that are used for the game will be presented in a way that it won't be hard to go through. This meaning that they won't be too small or too big and that the text will be legible. There also won't be too much text elements displayed on the interface.

User Interface Detail #2

Several other user interface details will be implemented into the game. These will be simple pause and menu screens. The pause screen will be executed when the players pauses the game leaving them with a text displaying the word "paused" until they resume the game. The user interface will also have an end screen that displays and thanks the player when they are done playing the game.

Weapons

Overview

The overall use of weapons used in the game are Cur's body-morphs that represent standard piercing-type weapons. Plarks have the ability to turn or morph their limbs into weapons by expanding the growth. It is done in a way where the shifts are made quick enough to make attacks become convenient to use. This is a useful ability for Cur as he progresses through the levels in the game.

Arm Swipe

Cur has the ability to morph his arm into a spear or sword-like weapon. This is a basic fighting attack he uses to defend himself from enemies in both Lume and Fade. Cur will momentarily shift his arm into a blade and swipe up to attack his enemies. It is a quick swipe so his arm turns back into a normal arm once the attack is done executing.

Musical Scores and Sound Effects

Overview

For our game, we desired to include as many original creations as it could. Thus, making our own sounds for the game was a must. Music can greatly impact gameplay by provoking particular emotions from the players, and by creating our own music, we believe we were able to do just that.

Fruity Loop Studio (Musical Score)

The music was created within Fruity Loop Studio, a program which none of us have had previous experience in using; therefore, there was a learning curve as we progressed with the making of our game.

We utilized and tested several plugins within FL Studio, but mainly focused in plugins that provided sound effects for string instruments (such as the plugin named "DSK Overture") to help us give a mysterious *feel* to our game.

BFXR (Sound Effects)

BFXR is a small program that specializes in creating SFX sounds for 8-bit games. We utilized this program to create all of the sound effects in our game (e.g. jumping, using a weapon, getting hurt, re-spawning, etc.). Although our game is not 8-bit, the sounds we created and mutated using this program were able to easily mix into our overall sound design and helped provide the *feel* we were looking for.

Sound Design

After collaborating and sharing each of our personal views and themes of the game, the whole team decided that we wanted to create a musical piece that provoked a sort of curiosity from our players. We aimed to set a mysterious, yet light-hearted mood within the game, signifying that there is the possibility of danger, but the idea of the journey ahead excites us nonetheless.

As we progressed through art, game mechanics, and sound simultaneously, we hit a few bumps in the road when we attempted to mesh all of our works together. At times, the musical pieces created seemed far too over-dramatic, and did not fit well with the bubbly art-style we had. In other moments, the music seemed too sweet or too happy in accordance with our background story. Thus, finding a way to create *just the right* musical score proved to be a struggle, but in the end, we were very pleased with our final product.

Single-Player Game

Overview

The single-player experience for this game is executed through a side-scroller platformer adventure. The game will take the player to traverse through levels and overcome puzzles & monsters and collect gems throughout their environment. This will be a way for the player to progress through the game's engrossing story until the end.

Controls

The controls for the game are very simple and can be accessed via keyboard or game controller.

Keyboard

Players can move using the A and D keys.. A is to move left. D is to move right. W is to jump. Space is to switch worlds. P is to attack.

Playstation/PC Controller

Left and right D-pad buttons to move. Up or X button to jump. Square button to attack. Triangle and Circle button to switch between Lume and Fade.

Mechanics

The mechanics included in the game give the characters the ability to interact and progress through the levels within the game.

Walking/Running

The player will be able to move around the level at two different speeds, depending upon what they believe to be necessary at each point of the game.

Attacking

The player will be able to attack enemies that are present within the game with their arm swipe attack to defeat them.

Climbing

The player will be able to climb up fauna such as vines or a beanstalk to travel upwards within the game.

World Switching

The player will be able to switch between the two worlds Lume and Fade. The player will have a limited time in the world of Lume before they are forced to switch back to Fade (this will be clearly indicated by a timer (represented as a bar) at the top of the screen) .

Story

In another universe with fantastical creatures and magical properties there exists two almost identical worlds, Lume and Fade. Lume is a world illuminated in bright and warm colors where daylight shines through all hours of the day and Luminescence is emitted into the air. Luminescence is the life force of Lume and a necessity to some species to survive. Lume is a world full of hope and motivation, where friendship, family and personal skill is valued; it is a world where life is about a day's hard work to gain personal achievements and happiness. But with all good things in life, that cannot always be achieved and not everyone can maintain their balance of enough motivation and hope to continuing going forward when their life turns bleak. As the cliché goes, with every light, there is a shadow and for that reason, a shadow world exists.

The shadow world is a world for those who cannot find their own personal achievement and happiness, those who have lost their motivation and hope to improve their skill and their life, and those who feel lost from their family and friends; it is a place where those who cannot lift their spirits up again exists. That world, is Fade. Fade is a shadow world where the spirits of some creatures find themselves when they cannot regain the hope and motivation to pick themselves back up and go on with their life. Fade is a world full of misery and self-pity for those who have reached a point in their lives where they have given up and found themselves in a slump they cannot overcome. The world of Fade is the alternate world of Lume, looking almost identical in structure, but with darker aspects both in appearance and atmosphere. Fade is permanently dark, with night existing through all hours of the day and the world in cooler shades of colors. Fade is supported by life force gems that are beacons of hope scattered through the world, representing how the world of Fade only exists because people have not regained their hope and motivation to find their way back to Lume. Without these gems the world does not exist, for Fade only exists for those who have lost hope and motivation.

Within the worlds of Lume and Fade, there is a story of two characters from Lume who finds themselves trapped in the world of Fade because of the hindrance of their emotional and physical obstacles in life. *The Tale of Cur and Rynn* features a heartwarming and thought-provoking story about the friendship of Cur and Rynn, their challenges and how they help each other find hope and motivation to stand up to try again. It depicts how friends can often be a powerful encouragement to give someone the hope and motivation needed to face, defeat and regain control of their battles in life, but ultimately at the end of the day the help of others can only go so far and the only person who can save themselves is still only them.

The Tale of Cur and Rynn

Deep in the luscious forests of Lume, there was the Village of Cinos where Squox and Plarks lived in peaceful coexistence, working side by side each day to create a self-sustaining village that provided for both species. They were species that lived simple lives, always looking forward to completing a day of good work and being happily satisfied with the friends and family they lived with. Squoxes were extraordinary scavengers and thus were mainly in charge of finding and gathering seeds for crops so that Plarks could plant and harvest them into Etals and Anaberries. The seeds for both Etals and Anaberries were often buried deep into the ground between tree roots, making it difficult to be found by Plarks, who did not possess the same keen smell and scavenging abilities as Squox. Instead, Plarks had the ability to significantly speed up the growth process of crops in general, making them the perfect candidate to plant, care for, and harvest the crops to perfect health in order to provide enough food for the two species.

Rynn was a hardworking Squox amongst the village and one of the most skilled, always looking for new locations to gather more Etal and Anaberri seeds or ways to excel in scavenging. These were skills that were passed down and taught to him by his mother who raised him to be the Squox he is. Rynn was a lighthearted spirit, always looking to the brighter side of life, always encouraging others to do their best. This was the case especially when he met Cur, who would be his longtime friend for years to come.

Cur had always been a little short sighted of his duties as a Plark to skillfully cultivate the crops and harvest them to perfection at the Village of Cinos. As a Plark, his main duties consisted of contributing to the village by cultivating crops and farming them. However, Cur was never truly skilled in his line of work compared to the rest of his species. Not only did he find trouble using his ability as a Plark to increase crop growth, but other Plarks had always managed to plant and harvest twice the amount he was able to. As a result, Cur was often demotivated from his work even when he was young, but Rynn would always encourage him that his skill was as needed as any other Plark and practice would make perfect one day. Despite their opposite of skills, with Rynn excelling in his abilities and Cur faltering to keep up, Rynn and Cur spent lots of time working together, developing a close friendship.

Rynn had always assured him, "Skills take time and honing, you know? It's not all naturalistic and you're just as important as the other Plarks. Don't put yourself down because of something you can't control."

Cur would always looked at him with an annoyed look, not always believing him, but nonetheless secretly showing admiration for his friend who took the time out of his day to help him overcome his little faith in his skills as a Plark. And for years that continued on with Cur and Rynn living as Squox and Plark with worries that could be overcome.

That was, until one faithful day when Rynn's mother passed away unexpectedly and unfairly. Rynn and his mother had been out scavenging for seeds and Rynn had insisted that there was a new tree he had discovered by the edge of a gorge that could be used to cross to the other side of the gorge so that they would surely be able to gather more seeds there. The branches had been shaky and their

footing was unstable. Before he knew it, Rynn's mother had slipped on the branch and fell into the gorge, falling to her death.

From that day forth, Rynn had stopped scavenging, had stopped seeing Cur, and had isolated himself away from the rest of the Squox in the Village of Cinos. Rynn blamed himself for his mother's death and was deeply affected by this incident, to the point that his previous hardworking and positive outlook on life had diminished and he had refused to see anyone. Rynn eventually found himself so far into hopelessness that he no longer had a place in Lume and one day, he woke up to find himself in in the shadow world of Fade. Fade was a world where those who had lost hope and motivation found themselves trapped in and unable to escape unless they regained the hope and motivation to stand up and try again. The village would later come to find that Rynn had disappeared, never to be seen again in Lume.

All the while, Cur had never been made aware of the incident, as no one had really knew what happened to Rynn or his mother. They had seemed to somehow disappear from Lume and the Village of Cinos without a trace.

Without the companion and friendship of Rynn in Cur's life to help encourage Cur to keep trying, Cur found life to become more difficult and harder to cope with. One year, Cur found himself to have killed over half of his crops due to the inability to increase their growth strong enough to adapt for the winter. Devastated by his actions and inabilities, Cur found himself in a depressive slump that he could not get out of. Similar to Rynn, he soon found himself waking up in the middle of a forest in the world of Fade.

--

Rynn looked at Cur, blinking in an effort to distinguish whether or not his eyes were playing tricks on him and that the Plark standing before him was real. "Cur? You...what are you doing here?"

Cur looked around, confused that the world as he knew looked similar, but off from the familiar warm shades he was used to seeing. Instead, his eyes were adjusting to cooler shades of familiar landmarks. "Rynn? I…what is this place? What are you doing here? What happened to our world?"

Rynn's eyes shifted, hesitant to tell Cur about the world they were currently in. "This…well, it's Fade. I've been here quite some time, I suppose."

Cur stared at him, trying to register what it was that his long lost friend was trying to tell him. "You? Fade?" he echoed back.

"Yeah. It's like Lume, but well different. This world, it's darker. More dangerous. Melancholic. Hopeless…," he trailed off.

Cur looked around, taking in his surroundings for a second time and hanging off the last word Rynn had said. Cur reflected back to how he'd been the past couple years and most devastatingly, the last couple weeks when he had managed to ruin half his crops for the year. The words melancholic and hopeless seemed to roll right

off his tongue, just the way Rynn has said. He never knew that there was a different world completely to where all the hopelessness from Lume ended up.

"Where hopeless people who has given up like me end up," Rynn finished reluctantly, ashamed to face his childhood friend and tell him about how he had given up on his friends and family after his mother had passed away. Rynn was at a loss of words to tell Cur of how he had found himself so wrapped up in the pain and heartbreak of losing someone that he became eternally miserable and unable to leave the world of Fade. It had been many years now, and not an ounce of hope or motivation had found its way back to Rynn since the day he woke up to find himself in Fade. Rynn knew that eventually, he too, like the world, would fade away into existence because he could not find it in his heart to lift his spirits back up again to return to Lume.

But then it dawned on him that if he was seeing his friend Cur here and he himself had not made it back to Lume, then surely it meant that Cur had become hopeless enough to enter the world of Fade. Suddenly he was overprotective and upset that Cur was there, despite how welcoming it was to see him again, but most of all it reminded him that Cur had always been a little lacking in his skills and since he was gone for so many years, there was likely no one for Cur to relieve his troubles to,

Rynn cleared his throat, "Cur, I don't know why you're here, but I know you and this can't be the end. You must leave quickly, while you still have time. There is no Luminescence in this world so you cannot stay."

It was a longshot, but Rynn had heard stories about a way to leave Fade. There was a story about the fragments of hope that speckled like gems across the world of Fade. The story that told of how anyone who was able to regain the hope in their life and showed the motivation to get up and keep fighting to defeat their battles would be able to make it to the Heart of the World. The Heart of the World was the portal between Lume and Fade where those who were able to stand up with renewed motivation and hope would be able to cross back over to Lume. Only those who showed the strength to face and defeat their fears, doubts, and regrets would be able to overcome the monsters and obstacles of Fade and return to Lume.

Rynn knew that Cur had no idea what he was talking about as he recounted this story to him. Rynn himself had never attempted it for lack of motivation and hope that he would truly succeed and after all, he had no real desire to return to Lume where the memory of his mother would forever haunt him. But if there was one chance that Cur could return home, it was a chance that Rynn was willing to take. He did not mention anything to Cur about how Fade would eventually cease to exist if they failed and how those who stayed too long would eventually fade away. Cur wouldn't last long without Luminescence anyways, and there was no reason to alarm him of the potential fate that Rynn had accepted for himself long ago.

Being reunited had brought back memories of their friendship and all the times they had spent together in Lume. Surprisingly, Rynn found himself with enough motivation and hope to tell Cur that he could still leave Fade. A hope that he had long forgotten and didn't know he had still possessed. It seemed that Cur had

relit a fighting spirit in him that had lost long ago. For the sake of his friend, Rynn promised that he would do his best to return Cur back to Lume.

Upon hearing the story from Rynn, Cur, albeit hopeless and unmotivated, was still unsure about the world of Fade and everything Rynn was telling him was almost overwhelming. However, Rynn had insisted that Cur was running out of time and returning to Lume with Rynn didn't seem like the worse idea to Cur as he slowly learned that Fade was much more dangerous than the world he knew despite the structural appearances being almost eerily similar. And so Cur reluctantly listened to Rynn and followed him out to an adventure to find the three life force gems of Fade. They were to seek the three key locations in Fade where their struggles in life had put them in a slump in the first place would come to life as a physical and mental challenge they had to overcome.

The journey they take will lead them to face three trials. The trials reflect on Rynn's struggles as he attempts to help return Cur and himself back to Lume. They learn how neither of them are alone in facing their own battles and that by helping each other, they were also helping themselves. As Cur helped Rynn face his battles and overcome the death of his mother leading to his loss of hope and motivation, it gave Cur the strength to pick himself up and try again. Cur came to the realization that while he may be lacking in his abilities as a Plark, he had other skills too. These skills included how he had the ability to help Rynn find his own hope and motivation to not give up in life, but move on from his painful past.

Their first trial was to seek out the Great Tree. The Great Tree was Rynn's home from the world of Lume, which was also the home that he shared with his mother. The second trial that they faced was defeating the shadows within the Cave of Shadows. The shadows took the form as Rynn's memories on the day his mother died and the events that led up to that incident. The third and last trial that they faced was to race against time to fight their way across the collapsing world of Fade and battle against the ghost of Rynn's mother, before determining whether one or both of them would be able to return to Lume.

Refer to the storyline section under "Level Design" for more details on their adventure and the ending of the story.

Hours of Gameplay

The game will only take a few hours to finish as a single-player game experience. It is a project game and will demonstrate what we can do if we had enough time to create a completed game.

Victory Conditions

The player will "win" the single-player game by getting to an ending of the game. In terms of "winning" a level, a player has to get to the end of that level. Ideally, the player would have collected the majority of the fragments spread throughout the level.

Character Rendering

Overview

The characters or models are entirely rendered through the art software Paint Tool Sai and Unity. They are also created using tablets with pen pressure sensitivity to create artwork as easily as it would be on paper (i.e. Wacom Intuous Pro, Microsoft Surface Pro, Ipad Pro). Overall, they are entirely made and animated from scratch towards the production of the game.

Character Rendering Detail #1

The models are all sketched inside an art software in Paint Tool Sai. Once a sketch design has been agreed upon, the model is then rendered into a full-body puppet with separate parts to create a spritesheet. The sketch goes through a process of being digitally inked over with lineart and colored in with flat colors. The process continues with adding in shadows, highlights, and then other bits of detail to refine the model. The model is then split into its separate parts to become a spritesheet.

Character Rendering Detail #2

Once the spritesheet is done in Paint Tool Sai, it is then moved over to Unity. The sprite pieces are split in order to be recognized as individual parts. They are then put together to form the whole model to prep for animation.. Once the model is put together, any set of animations can be made for it such as an idle, walking, attacking, jumping animation, etc. Each animation is split into its own different file and can be separately implemented into the game.

Technical Specs

Programming languages:

Everything was programmed in C#, and compiled in Visual Studios, both of which are supported by Unity.

Libraries: We only utilized the built-in libraries within Unity.

Engine Used: Unity

Target hardware and Operating System: PC's on Windows

Data Structures/ADTs/Classes:

We mainly utilized data structures such as lists and arrays within our code in order to modify parent/child objects that were created within Unity's interface. That being said, data structures such as trees/graphs were also used, but were automatically implemented in the background of our code when we created hierarchies within Unity's interface. In other words, we did not have to build data structures such as trees/graph via code; they were already built-in for us.

In regards to classes, we had several attached to different game objects (classifying them as enemies, player attachments, ground assets, etc.). Similarly to what was stated in the previous paragraph, Unity's interface allowed us to very conveniently create these classes without having to rawly implement them via code. Some of the classes from Unity that we used involved cameras, colliders, quaternions, rigidbodies, vectors, animations, and many more. Figuring out how to use Unity's interface and how it correlates with the code we were writing proved to be the largest struggle.

Exact algorithms:

We depended a lot upon the Update() function that is provided by Unity. Within this function on our scripts, we mainly performed constant calculations or utilized physics methods and built-in classes in Unity that overall, allowed a majority of our scripts to run in either constant or linear time and produce quality gameplay.

There was a need to optimize the way in which we were dealing with game objects. More specifically, the amount of game objects that were present within our game. At times, we needed to instantiate an object from a prefab we created within Unity's interface, but in order to make sure our code ran efficiently, we would have to keep track of each of those objects, and delete them when they were no longer needed. In this way, we were able to ensure that our memory wouldn't be clouded up with garbage.

In regards to the calculations that we had to perform in our algorithms, much of it depended upon testing. A majority of the time, it was simply a matter of playing around with different numbers, testing the output on our game, and deciding whether or not it fit well with our gameplay. For instance, when determining how high a player should be able to jump (or if they should be able to jump at all), it was a matter of testing how far of

a distance they were from the ground, and what number appeared to be a suitable jump height.

Backup and Version Control plans: Github and Google Drive repositories

Schedule and Personnel

Leon Ly - Programmer, Storywriter, Game Designer
Caitlin Creekmore - Programmer, Sound Designer, Storywriter, Game Designer
Kathy Pang - Web Designer, Marketing, Storywriter, Game Designer
Christian Amaya - Web Designer, Marketing, Storywriter, Game Designer
Kirstie Delos Reyes - Artist, Animator, Storywriter, Game Designer

- Week 1
  - Formed the team and chose the company name.
  - Began to brainstorm ideas for a potential game.
- Week 2
  - Decided on a side-scroller 2D platformer using Unity
  - Leon presented a general concept of what he envisioned our game would be.
  - Drafted company logo ideas.
- Week 3
  - Each team member drafted their idea and version of the storyline with the same foundation and basic features Leon had provided initially.
  - Began Unity tutorials and attended Unity Workshops.
  - Kirstie designed the final version of the company logo.
- Week 4
  - We decided on the pros and cons of each member's storyline and created a finalized version with our combined ideas.
  - The team outlined what would eventually become a fully fledged design document.
  - Kirstie designed our first main character, Cur.
- Week 5
  - Leon created a very early version of what our game would end up becoming.
  - Caitlin created small music tracks for the game.
  - Kirstie created concept art for Rynn, as well as a scenario of both Rynn and Cur together in a dense forest.
  - Kathy and Christian began to build a basic website from scratch.
  - We began to fill in information on the design document with the game overview.
- Week 6
  - Leon and Caitlin continued experimenting with the layout of our game, creating platforms and simple environmental puzzles. They also finalized basic movement and jumping mechanics, as well as the ability to collect items.
  - The team continued to develop the main story elements of the game. We faced many conflicts on how we would develop the character's relationship and the purpose of their journey.
  - Kathy and Christian continued to design a responsive layout for the site.

- We continued to develop more concrete and detailed descriptions of the characters, their personality and what the world of Lume and Fade would look like on the design document.
- Kirstie created a concept art for the background of Lume and an alternative version with different colors for Fade. This would later be used as the background of the website.

- Week 7
  - Leon and Caitlin continued to work on inputting more game mechanics. They implemented game physics such as collisions with objects.
  - Caitlin finished a couple sample original soundtracks that we could use for the game using Fruity Loop Studios.
  - Kathy and Christian decided to implement Bootstrap into their website to ease the layout creation process of the website.
  - Kirstie created the first fully animated sprite that would be used in the game, Cur. She also finished concept art for the monsters in the game.
  - Christian, Kathy, Kirstie, and Caitlin further developed the background story by creating a background for story for Cur and Rynn, as well as developing a purpose.

- Week 8
  - The team began designing what would be the first complete level of the game, drafting a sketch of the layout.
  - Leon and Caitlin imported more assets into the game and worked on extending the length of the level design and layout created earlier by the team as a whole.
  - Kathy and Christian designed the home page layout of the website and managed to make the site responsive, which would be the foundation for all of the other pages.
  - Kathy wrote the content for the home page.
  - Kirstie completed the second animated sprite of the the game, the Sunpillar. Kirstie also began to work on art assets for objects that would be in the game such as thorns, sap, treated soil, repeatable grass and textures for platforms.

- Week 9
  - Leon and Caitlin began to implement the textures, animations and Kirstie's art assets into the game.
  - Kirstie continued working on game assets and animations for the monsters, their attacks and created and animated the level 1 boss, the Great Tree.
  - Christian created the gallery page on the website, mainly consisted of Kirstie's concept art.
  - Kathy created the FAQ and Contact Us Page for the website.
  - Christian and Kathy further developed the design document, designing other levels and objects that would be implemented further down development.

- Week 10
  - Leon and Caitlin continued to further develop the first level layout, incorporating sounds and the music, the boss, the user interface screen, and small functional details such as checkpoints and health.
  - Kirstie, Christian, and Kathy completed the design document, finishing the level designs, filling in holes in the story, etc.

○ Christian designed and filled out the Brochure.

Appendix

Concept Art

Cur
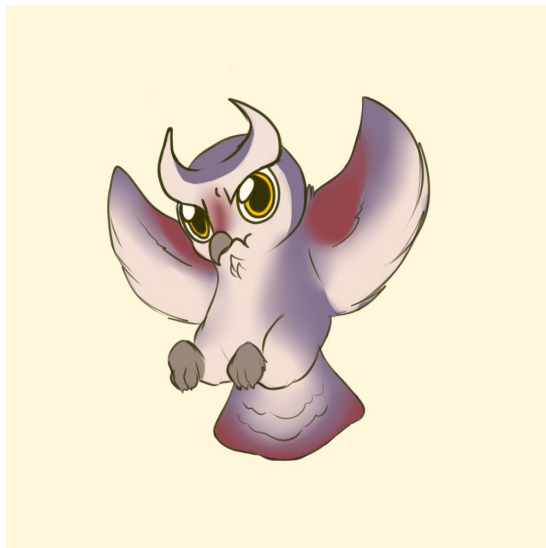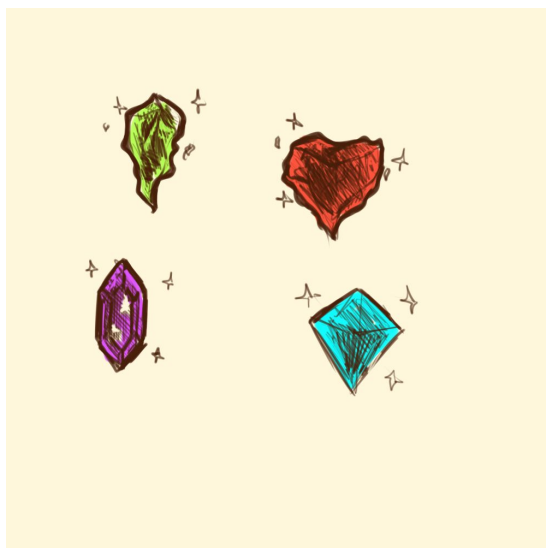

Rynn

Sunpillar

Mist Void
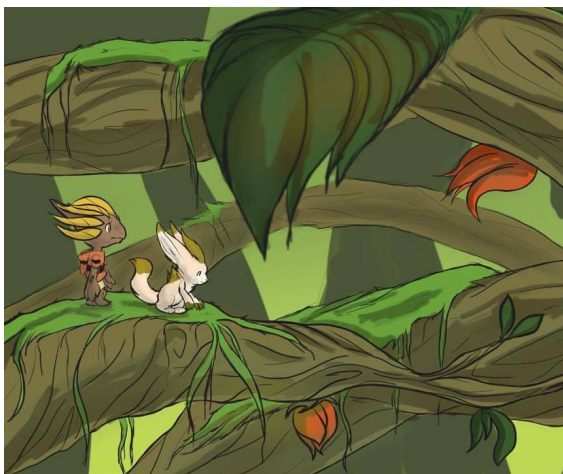
Sol Pigeon

Dusk Owl

Lunar Spider

Gems

Cur and Rynn

Rift Opening Concept

User Interface

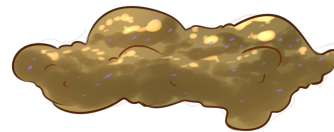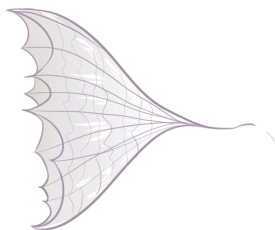## Character Rendering and Animation
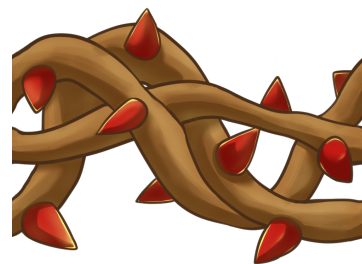
Cur

Lunar Spider

Gems

Spring Mushrooms

Pellet

Treated Soil

Web Shot 1

Web Shot 2

Thorns

Vine

Website URL

https://lume-fade.github.io/lume-fade/index.html

Remarks

This section will serve as a way for our team to list the extra necessary steps we took to accomplish the assignments for the Informatics 125 course.

Art
- Created sketches until team agreed on designs
- Looked up additional research and inspirations for character design
- Looked up tutorials and information to animate models and character spritesheets within Unity
- Used Krita to help create seamless tiles
- Used specific digital art tools such as a tablet with pen pressure to draw

Demo
- Attended Unity workshop
- Completed several online tutorials for Unity since this was our team member's first time with the software

Website
- Learned Bootstrap to create a precise layout for the website.

Third Party Artwork References
- Rotival, Emilien. *Story Factory*. Digital image. *Pinterest*. Behance, n.d. Web. <https://au.pinterest.com/pin/474426141974019727/>.
- Some of the rocks in the game. Can appear to be in a small collection of rocks. Contains moss on them and have small mushrooms/plants growing around them.

Digital image. *Pinterest*. N.p., n.d. Web.
<https://au.pinterest.com/pin/517069600947325521/>.
- The tree at the beginning of the level. Its leaves are green and its bark is brown,. Digital image. *Pinterest*. N.p., n.d. Web. <https://au.pinterest.com/pin/557601997588486993/>.
- Vertical logs found throughout the level. They have a red, brown color to it. Sometimes, they have moss on them. Digital image. *Pinterest*. N.p., n.d. Web. <https://au.pinterest.com/pin/439523244861955343/>.