Introduction - Firefly

Game Pitch

Firefly is an interactive puzzle about a little lightning bug who is afraid of the shadows, but he must learn to use his light to overcome the darkness. Along the journey to The Luminous Hollow, berries with mysterious properties will help provide him the abilities he needs to face his fears.

Inspiration

Outer Wilds

Outer Wilds is an open world interactive puzzle about space exploration, but the true heart of the game is the story that is told along the way. There are almost no explicit instructions in this game, and it uses an organic way to teach people how to play the game. Additionally, music is used as a set of emotional instructions to make you connect with the character on a deeper level. Music is key to any atmospheric game with a story to tell.

Mojo! (2003)

Call me a boomer, but this classic game from my childhood has "color changers" that allow you to solve different parts of the level depending on the color you are. You might have to use the red color to unlock the yellow color in order to go back to that place at the beginning that has a key that you'll need to get past the black hole next to the… etc. etc. This game uses visual cues to point you in the right direction while also making you feel like you solved it yourself, because you did!

Kena: Bridge of Spirits

This game has a very beautiful world filled with incredible nature scenes. Ember Lab employed a very good mix of cartoon and realism that I hope to emulate with Firefly's visual style.

Player Experince

The player will be introduced to a small bug and be given a goal to reach the Luminous Hollow, a place where the character can learn to use his light to defeat shadows. The player will use berry powerups and other puzzle mechanics in clever ways to clear a path to the Hollow. These puzzles will throw the player in and have them explore and figure things out rather than telling them "Do X, Y, and Z."

Development Details

This will be developed for PC using Godot 4. The genre is story-based interactive puzzle, and is intended to reach individuals struggling with self-worth or identity.

Gameplay

Overview

The character is a bug that moves around with WASD. The camera is a hybrid of top-down and isometric, while not truly being either. The perspective is meant to make the player feel small, almost like a child with a magnifying glass looking at a bug. The movement of the player is relative to the camera angle. There is no running mechanic, and the character can only hop a small height. Objects can be interacted with by touching them or using the Action key (future mechanic). There are colored berries throughout the world that each give the player a specific ability when eaten. When the character eats a berry, the bug's light changes to that berry's color to indicate that that powerup is active. The player will use these powerups to solve puzzles in a continuous manner. Puzzles should not feel level-based but instead feel organically strung together to create one continuous journey.

Primary Mechanics (Puzzle Spoilers!)

Shadows

Shadows are the main antagonist of the game. These will appear as darker areas that appear to suck away light. It will look like a pure-black oil spill on the ground with a dark fog coming up into the space above. When you get near a shadow, little tendrils will reach out a little bit in your direction as if they're trying to grab you, but this is purely cosmetic. Entering a shadow will zoom in the camera, reduce your movement speed, and begin to dim your light (oh no!). If your light is put out, you die! These shadows will be used as the main mechanic for puzzles and pose problems that need to be solved. Players can find out visually "Oh, I need to figure out how to get past that" rather than having a textbox appear and tell them the same.
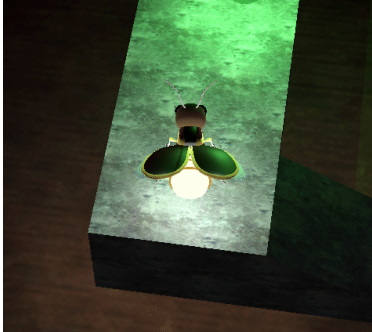
Berry

Throughout each area, there are magical berries that the player can consume to gain PHENOMENAL COSMIC POWER! In other words, they give you special mechanics to allow you to solve puzzles. Can't make it past that gap? Looks like you'll need to grab that berry to be able to fly across!
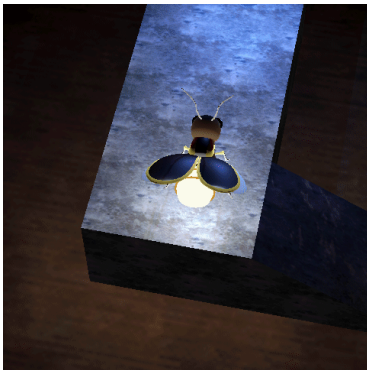
Berry - Flight
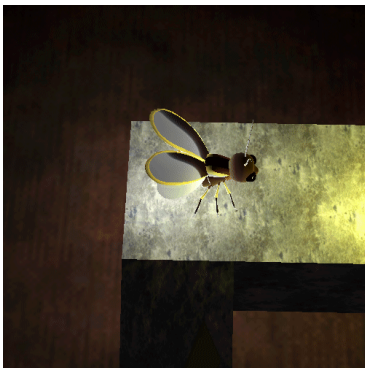
This yellow berry gives the player the ability to hover to 1.5s, which can be used to get over gaps previously unpassable.

Berry - Jump

The green berry allows the player to jump very high. This can be used to reach floating objects, climb up walls, or jump across gaps.

Berry - Speed

The blue berry gives the player super speed! This could be used to run away from a shadow monster, to beat the clock on closing opportunity, or to just run around in a circle all day, your choice!

Look and Feel

This game is meant to be cute and atmospheric. I want the player to feel like a tiny bug in a very big world and experience not only the fear but also the beauty that comes along with being a part of something much bigger.

Art

The art style is cartoon, with a blend of low-poly and realism. While the character might be cartoon, it is important to capture the vast beauty of nature, especially from such a small perspective. Raindrops on leaves, a

million lights in the forest, the feel of the dirt beneath us: I want the player to be immersed in these experiences. Ambient effects will be key to creating a beautiful world. The end goal is to make closing the game feel like being a kid and coming back into the house after playing outside at dusk when all the fireflies come out; it's sad to leave such a beautiful world with all your new friends!

Music

I believe music defines a significant part of any game. It is absolutely crucial for the game to have music that tells a story to its listener. How do you depict the raindrops starting to fall on the forest, then the hiding bugs slowly poke their head out to find that, maybe the rain isn't so scary after all? Music is a set of emotional instructions. We have been entrusted with our players' emotions and have a duty to create a feeling they'll want more of.

Looking Forward

Core Premise

At heart, this game is about a bug's journey to discover his own ability to overcome his fears. When development continues for this game, this is what will remain even if the rest of the mechanics change around it. While I didn't get much of a chance in the MVP to tell the story I want to, I still the demo game supports enough theatre of the mind to get the players interested in the story. I hope to build on this in the future.

Mechanics

Yes, there are very few mechanics in the demo, but I have had many ideas for mechanics. Objects tied down by web that need to be cut free, hitching a ride on much bigger creatures, pushing around a rock to build a staircase, maybe even fire burning through a blocked passage way: these are just some of the ideas I hope to experiment with moving forward.

Art

I'm no artist. As a mathematics major, I'm a bit familiar with technical art, but that is only part of the solution this game needs. I have a very particular idea in my head of how this is supposed to look, but executing that idea will take some help. I think the open assets used in the demo are a nice step in

for theatre of the mind, but there are a lot of improvements to be made to the visual style.

Music

Obey is an absolute BOSS with this style of music, he has been a great (great) asset to the project! One of our primary goals for the soundtrack is to make songs share common themes and phrases as references to different characters or places. For example, Luminous Hollow from the [OST](#) uses a slight variation of the main theme. A listener can imagine that song as the character's reaction to seeing the beautiful Luminous Hollow for the first time, awe-inspiring! This is something we hope to continue with for future songs.

Story

While I have not figured out how best to do this, I am hoping to create cutscenes for key moments in the story like the origin of the shadows or meeting a new friend along the way.

I believe that self-worth is something everyone, myself included, struggles with. While some may connect with the story more than others, I'm hoping for anyone that plays to be able to project their beliefs or current issues onto this story and have it fit. If we're lucky, maybe it will leave someone encouraged.

Development MVP:

#	Assignment	Type	Status	Finish By	Notes
1	Brainstorm - Part 1	Other ▾	Finished ▾	Jul 24,…	
2	Create capsule and make it move	Coding ▾	Finished ▾	Jul 20,…	
3	Add glowing ball to capsule that changes	Coding ▾	Finished ▾	Jul 20,…	

#	Assignment	Type	Status	Finish By	Notes
	colors				
4	Add obstacles to floor	Coding ▾	Finished ▾	Jul 20,…	
5	Make a "kill zone" obstacle to use as shadows	Coding ▾	Finished ▾	Jul 20,…	
6	Make a basic puzzle mechanic involving shadows and avoiding them	Coding ▾	Finished ▾	Jul 21,…	
7	Does the mechanic involve a different color?	Story ▾	Finished ▾	Jul 21,…	Used the "Flight Berry" as a mechanic. It's a yellow powerup that gives 1.5s of flight when holding space.
8	Put together a basic level using a single mechanic	Coding ▾	Finished ▾	Jul 22,…	
9	Put a layer of paint on what we've got so far. Open models, textures, etc.	Art ▾	Finished ▾	Jul 23,…	Got some CC0 models
10	Get the music playing a little bit	Audio ▾	Finished ▾	Jul 23,…	Obey's main Firefly theme now plays on loop, just a placeholder.
11	Game structure improvement, make minor organizational upgrades to the code or scenes	Coding ▾	Finished ▾	Jul 25,…	
	MVP should be	Art ▾	Finished ▾	Jul 27,…	

#	Assignment	Type	Status	Finish By	Notes
	complete. Decide what to focus on for the remainder of the jam.				
	Brainstorm - Part 2	Other ▾	Finished ▾	Jul 27,…	There's enough of a running start, extend out the design document and come up with a solid plan for exactly what we want done for submission next week, including new puzzles, potential story moments, and other goals.
	Put together main menu and death screen UI	Coding ▾	Finished ▾	Jul 28,…	
	Finish implementing Obey's music	Audio ▾	Finished ▾	Jul 29,…	
	Put Quaternius's glorious Firefly model into the game!	Art ▾	Finished ▾	Jul 29,…	
	Finish out the GDD with the future direction of the game.	Other ▾	Finished ▾	Jul 30,…	
	Mess around with extending the level a bit before submitting.	Coding ▾	Finished ▾	Jul 30,…	
	SUBMIT!	Other ▾	Finished ▾	Jul 31,…	
	Sleep for a long time	Other ▾	In progress ▾	Aug 3, …	zzzzzzzzzzzz….

Early brain dump design (This was literally where I started, just blurting ideas on a blank page):

There's a bug that's afraid of the light, and you need to manipulate shadows to help the bug get to his destination. You can move blocks or shade him as he goes. Maybe he has something (egg?) that if it touches the light, it dies.
Is this a firefly? Maybe you have a firefly to help you through the shadows?

Twist at the end, he turns into a beautiful butterfly.

Settled: I want there to be a little bug on the ground walking around.

There's a leaf that you need to move over, so you need to chew the thing tying it down to free it. There's little berries that you can eat or mix together to gain different abilities to solve puzzles, this is tapping into the alchemy part of the theme. They'd be color coded.

Next day:
Idea: AVOIDING the shadows, or the shadows will consume the light! There's a little firefly who can't touch the shadow or he'll get overcome by it. There will be different colored berries that will make him glow different colors to get different abilities to solve puzzles.

Idea for mechanic: Holding space can make you hover for a short period of time. It's not a "jump" though.

Another idea for later: different colored shadows, you need to have a certain color active to pass through them?