

LILALAND

2024 BOOOMJAM GAME PROJECT



GROUP PROJECT

DIRECTION/

Game Design

ROLE & CONTRIBUTION/

Concept 80% Level Design 20%

Game Art 80% Coding 20%

TEAMMATES/

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TIME/

2024.08

DEMO LINK/

datepalm.itch.io/lilaland

Concept: An illusion of Validity

In 2020, the endangered pangolin was officially upgraded to a national level protected animal. Data released by CITES in 2018 showed that the Chinese pangolin's population has decreased by 90% in the past 20 years. Because of its perceived medicinal and food value, the number of pangolin consumed in the country is huge, and cases of illegal hunting, smuggling, and trafficking of pangolin occur from time to time. We were very saddened to see such news, so we wanted to implant the theme of **animal protection** in the game.

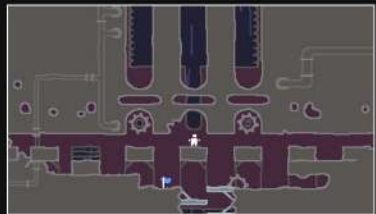


Rubin's vase:

Rubin's vase is a famous set of cognitive optical illusions developed around 1915, by the Danish psychologist Edgar Rubin. The illusion generally presents the viewer with a mental choice of two interpretations, each of which is valid. In our daily life, the ground, walls, doors and other items will be seen as valid as these are the things we can feel directly.

In contrast, video games operate under different rules. What if the validity of these perceptions could shift while the environment remains unchanged? This opens up the possibility for players to explore impossible places, potentially immersing them in the pangolin's perspective as well.

Video Game Reference



Leap Year is a platformer about knowledge and discovery. In the game you will play as a little man who can only move and jump, but when you fall from different heights, different things will happen: the main character will die, bounce back, go through solid ground or he will be able to walk on the ceiling.

Fez is a perfect example for the theme of change. The game is about dimensions. Gomez is a 2D creature living in a 2D world, when the existence of a mysterious 3rd dimension is revealed to him, Gomez is sent out on a journey that will take him to the very end of time and space.

TUNIC is an isometric action game about a small fox on a big adventure. During the travel, the player will reconstruct the game's Instruction Manual. Page by page, the player will reveal maps, tips, special techniques, and the deepest of secrets.

Background Story

In this game, Lila's quest to find her lost cat transforms into a fantastic adventure centered on harmony with nature. Set in a polluted mountain forest, she encounters mysterious pangolins and colorful butterflies while participating in meaningful trash-picking activities that emphasize environmental issues. The butterfly symbolizes how small actions can lead to significant change. By restoring the power of the forest spirit, Lila underscores humanity's profound connection to nature, inviting players to reflect on their roles in environmental stewardship and inspiring them to commit to protecting the world around them.



Main Character: Lila



Lila-Human Form

The players will play as Lila - a girl who has lost her cat in the forest. In order to find her cat, she enters the pangolin's territory and embarks on an adventure.

The character's basic skills include moving left or right, and also jumping onto platforms that are two blocks high.

With the help of the goddess, she was able to transform into her ghost form and travel through the solid land.



Lila-Ghost Form

After using the butterfly's magical ability, Lila will temporarily turn into a ghost.

For the ghost, the world's void and solid are reversed, while gravity is upwards. Basic moving skills are still the same, while the ghost form have some extra ability.

In the ghost form, Lila cannot move from one scene to another, so the player will have to transform into human form to move on.

Frame Animation



Move
Idle
Jump

Ghost
Form

Transition

Items

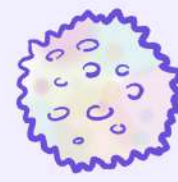


Azoni's butterfly

The butterflies are actually the incantations of Azoni. They're spread all over the forest in order to help Lila.

There are two types of butterflies, the white ones and the purple ones. Once the player touches the butterfly, it will follow. After using their ability, it will leave.

Frame Animation



Garbage

Wildlives in the forest suffers from pollution and garbage. And the player is able to help them by clearing these dangerous garbage.

There will be 30 garbage in the game for the player to clean, and these are advanced challenges as some of them are hidden.

Frame Animation



NPCs & Enemy



Pangolin

The pangolins are the native wildlife of the forest. In the real world, pangolins have been hunted by humans on a grand scale, which, combined with the destruction of their habitat, has made them protected animals. So in the game, the player is able to do something to help these lives.

In addition, most of the pangolins are friendly, and they are familiar to the forest so they will show the player the way directly or offer some tips about the puzzle.

Lila's cat

The little black cat was missing somewhere in the forest. The player need to find her, but she won't show up unless the player has found the catnip on the top of the mountain.

After finding the catnip, the cat will appear in the underground shrine. If the player get close to her, the cat will stay on Lila's head. After that, the player can still continue adventuring and helping the pangolins, but can also choose to ignore these creatures and go home.



Spirit of the Forest: Azoni

Azoni is the spirit of the forest, and her entity is the wooden female in the underground shrine. She exists to protect all life in the forest.

She's been battling pollution in the forest and she is exhausted. The magical butterflies are her messengers and they are sent to help Lila. If the player choose to clean all the rubbish in the forest, then she will wake up again and thank Lila for her help. However, helping her is just an optional challenge in the game.

The Mushroom Monster

The mushroom are dangerous monsters in the forest, they went mad because of the pollution. If a player encounters a mushroom, it's best to avoid frontal attacks.

Frame Animation



Catnip

The catnip is something the player can find on the top of the mountain.

After picking it up, the cat will finally show up, and the player will fall to the place where the game started. With the knowledge of the advanced skills, the underground shrine will be found.



Scenes



Level: Foot of the Mountain



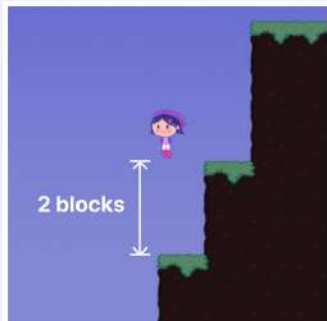
Level: Shrine

Coding

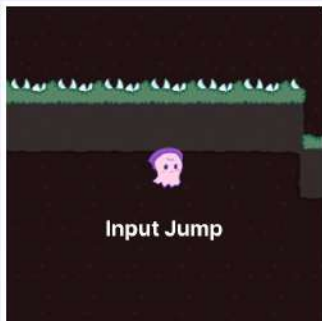


Basic Moves

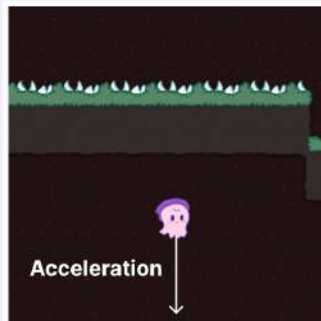
Move & Jump



Lila can walk left and right, and she is able to jump onto two-blocks-high places.



Lila can stick to the ceiling and move in her ghost form.

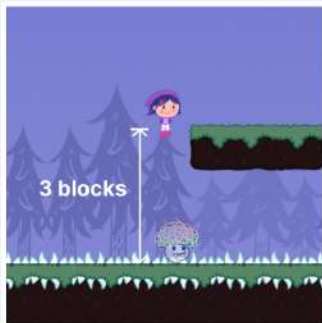


Jumping will leave the ceiling, and offer Lila a downward velocity.

Monster Ride



Lila can stand on a monster and go through the danger zones.



The monster is almost as tall as one block, so it can help Lila to jump onto higher grounds.

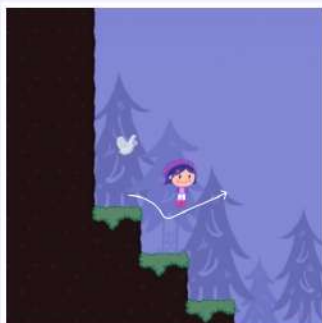


Some times it's necessary for the player to give the monster a lift.

Coyote Time & Input Buffer



Sometimes players will jump on the edge, so details about jumping is necessary.



Coyote time allows players to jump within a short time after leaving the platform.



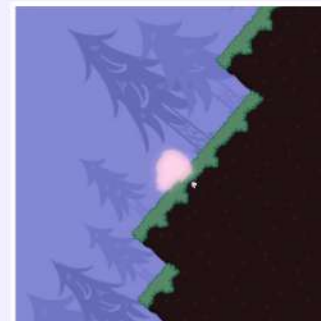
Input buffer allows players to input the command for jumping a short time before landing.

Core Mechanics

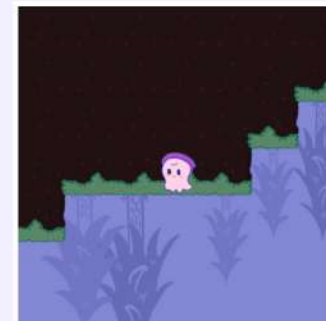
Reverse



When Lila reach a white butterfly, the player will have the ability to reverse once.



Using the butterfly's ability to go into a reversed world.

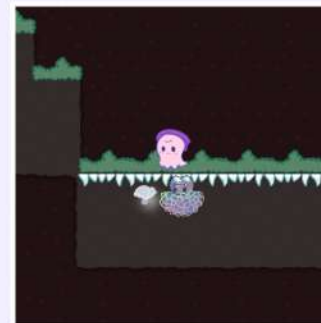


Now Lila is in the reversed world, do these again to return to

Reverse Monster & Purple Butterfly



The white butterfly can also send the monster to the reversed world.



Both normal and reversed monsters can fetch items for Lila.

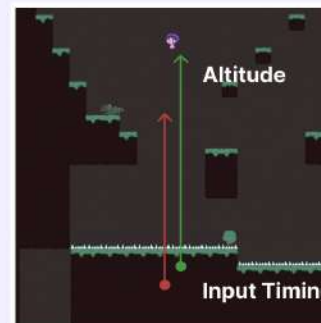


When reaching the purple butterfly, Lila will be forced to reverse.

Gravity Jump



Using the butterfly's ability while falling, Lila will jump high in the reversed world.



The higher the falling velocity is, the higher Lila can reach.



The white butterfly only works at low falling velocities, while the purple ones have no limits.

General Level Design

General Level Design Principles

- 1. Knowledge-based Gameplay**
Lila starts with all the abilities. Knowledge will be mastered by the player as the game progresses.
- 2. Scaffolding**
When a new mechanic arrives, player will also learn it in a easier puzzle.
- 3. Multilevel Challenges**
The map is linear and completing the game is easy. But there will also be more difficult branch collections.

Top of the Mountain

On the top of the mountain, the player will let a monster step over Lila to reach the final garbage. The key to Lila's cat is also on the edge of the cliff.

Ceiling Moves

The player will fall off the cliff. So it's about time to learn things about ceiling moves. After that the player can go into the cave.

Purple Butterfly

The only way forward is blocked by a purple butterfly, so the player have to touch it, then find a way back.

Reverse Monster

A puzzle about two mechanics is here, which is a designed eureka moment. After that, the player reach a high ground and learn how to send a monster to the reversed world.

Monster Ride

The player have to ride a monster to go thru a danger zone. The monster will also fetch things for Lila.

Practice

These three scenes are all about the white butterfly's reverse ability. The player will learn about how and where to use it correctly step by step.

Besides, a hidden path is also included, the player's knowledge about gravity jump is needed to reach there. The path is a shortcut to a latter scene and a hidden garbage.

Knowledge about New Skill

The player will learn about how to use the white butterfly to reverse here. And the player is able to return to the first knowledge lock.

The First Knowledge Lock

A white butterfly is here but the player don't know how to use it. So the scene just looks like a random dead end. The player needs to continue the game and learn new skills. Then the player can finally return and use reach the hidden garbage.

Journey Begins

The game begins at the foot of the mountain, basic skills like move and jump will be introduced.

Platformer

A series of paltforms are placed in the second scene, which tests the player's basic moving skills. The pangolin will also ask Lila to clear the garbage.

The Shrine

A hidden scene at the beginning of the game. The scene can only be discovered by players who have mastered gravity jump. Of course, when the player jump from the mountain, it's very possible for he or she to find the place. If the player got the catnip on the top of the mountain, the cat will show here. If the player is capable of find and clear all the garbage, the goddess will finally wake up.

Exit

The player can leave the forests and finish the game even if the cat is not found.