

# **Project Mushroom Game Design Document**

**2D action platformer**

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# Story

You are a dark forest spirit named Capra who collects mushrooms for your own magical needs. As you enter your mushroom forest to start gathering, you start to realize there's something wrong in your forest.

Mushrooms are attacking back and their spores are turning the world around

into something bad. You must traverse the forest and fight through enemies and solve puzzles to figure out what has made mushrooms your enemy.



# Theme

Pixel art styled, dark wooded forest experience. Vibrant purple, blue, and green colors for a more space themed experience within a forest which will give a unique look to the game . A mixture of colorful space hues and the feeling of dark arcane magic is roaring through the forest. The environment should make the player feel that they are the only being of their type, giving them a better understanding of their role in this world.

Mushrooms are a big theme in this game with the whole aspect being the player interacting with them in different ways. Enemies, environments, and interactables will be based in something that relates to mushrooms. There can be an educational aspect integrated into the game that adds some realism to it. Enemies that produce spores might be named or modeled after mushrooms that spread many spores.

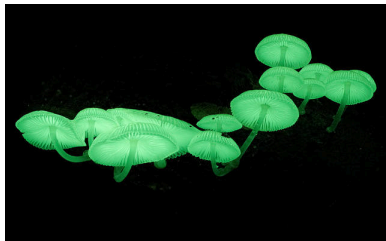
The main and playable character is a dark forest spirit who uses mushrooms for magic. This character, named Capra, should give off that very shamanistic feeling to their design. One that is in tune with their environment.

## Setting

Dark wooded mushroom forest where the levels switch colors due to enemies' presence.

The game takes place in a dark high fantasy setting where animals are the majority of life.

Animal Spirits are scattered through the forest that can interact with the player for hints and information.

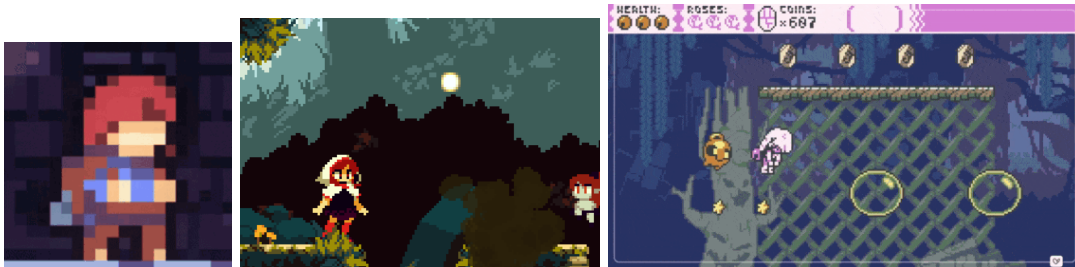


## Gameplay

A 2D action platformer where as the main character you will traverse obstacles using a whip/spear to bypass areas. There will be different types of enemies and puzzles to throw some challenge to the player.

## Character Controller

Capra should feel fluid and quick. That fluidity must transfer between inputs and animations as well. Examples of this are like the squish and squeeze feel of the character Madeline in the game [Celeste](#) or like the seamless animation transitions similar to games like [Momodora: Reverie Under The Moonlight](#) or [Curse Crackers: For Whom the Belle Toils](#). Giving Capra more life and a more visually pleasing look to the eye.

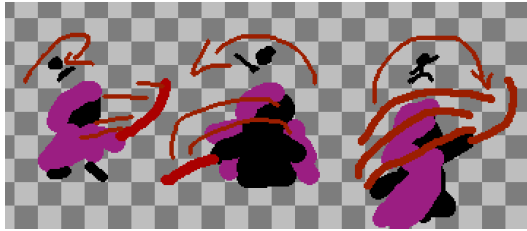


**Controller:** The player will be able to switch between two states. A weapon and non weapon states. In the weapon state, the player can attack and use the makeshift platform to move within the levels. In the non weapon state the player has lost their ability to attack until they summon their weapon again, removing it from the world space.

**Movement:** Typical 2D platformer movement. Traversing through the level should be enabled with the use of the spear that can be made into a makeshift platform when it collides with walls. Allowing the player to reach greater heights..

**Attacks:** Depending on button presses within a certain time frame, the player will be able to hit three times with each hit becoming more powerful than the last. The player also has the ability to

use the spear as a thrown projectile to damage and stick into enemy's.

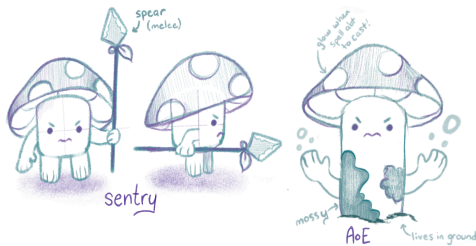


**Cloaked dash:** An ability that allows the player to shade themselves and move forward. This makes them invincible and allows them to traverse platforms. It can not go through walls but will allow them to move behind enemies. It will not work when entering a spore cloud or hazards similar to this.

## Level Design

Levels will be designed behind platforming, light puzzles and enemies to challenge the player..

### Enemy Types(room to add and remove):



- **Patroller:** Simple patrolling enemy that when player becomes too close it changes to a state of chase and deals contact damage to player.
- **Spore Assault:** A stationary enemy that has an attack pattern where they charge for x amount of seconds then release a burst of 3 spore clouds that restrict the player from pushing forward. Usually enemies like this are at a different elevation from the player or a distance away where the player cannot simply walk up and kill before the spore release.
- **Spawner:** The spawner has little clones that he is linked with. When introduced, the spawner will have x amount of clones and when the player kills a clone before the

spawner, the spawner will release 2 more of that enemy. There will be a cap in which the spawner will not release too many clones where it can become overwhelming.

- **Tank:** Considerably has more health than the player must dwindle down. The player must avoid the heavy hits of the tank especially since it can't be beaten in one quick hit.

## Puzzle Designs

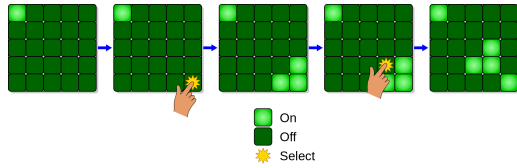
Besides enemies, a small portion of the challenge should be puzzle solving. Puzzles utilizing enemies will be great for the action aspect but also some room puzzles that can challenge the player to think differently as opposed to fighting their obstacles should be implemented. Just having one of these puzzles in the game is a big goal for some release.

### Easier puzzles:

- **Target puzzles:** This is where the player must hit targets to open doors before proceeding into another room.
- **Uncrossable pool:** Having a location where the player can't cross due to a hazard would be ideal; whereas the player can use the spear and impale it into an enemy making a moveable platform. That way the enemy can cross safely through this hazard and the player can "ride" along with it.

### Harder Puzzles:

- **Lights out puzzle** ([https://en.wikipedia.org/wiki/Lights\\_Out\\_\(game\)](https://en.wikipedia.org/wiki/Lights_Out_(game))): This puzzle is very challenging to implement into a 2D sphere but something similar to this would be nice to challenge the player. The use of pressure plates might help with the puzzle in the background and be made on a smaller scale (preferably 3x3 grid).



## Environmental Interactions

**Non-Playable Characters:** The player will be able to interact with spirits within the forest.

Blue-transparent like animal spirits that communicate to help guide the player. This can be animals found in forests and even animals that consume mushrooms specifically.

**Special Platforms:** There will be platforms that will launch the player up as if bouncy ([https://en.wikipedia.org/wiki/Mycena\\_chlorophos](https://en.wikipedia.org/wiki/Mycena_chlorophos)). Also platforms that will work as pressure plates, if the player is on top of them, something will happen.



**Hazards:**

**Toxic gas/spores:** Gaseous areas where the player will take damage over time when inside.

**Safeguards:** I'd like some safe spaces like in the game momodora or dark souls where they use a "[safe room](#)" or safe location to save, restore health, and upgrade items.

## Future plans and ideas

- **Boss Enemy:** End level boss that the player fights to figure out more of the story. The boss should be a test for the player to utilize and show their skills they have learned. Using past puzzles, enemies, and interactions during this fight will help with creating a good boss.



- **Upgradable stats:** Examples being the ability to throw more than one spear, or being able to “super jump” when on the sphere. Even air attacks can be used once the ability is unlocked.
- **Enemy Reset System:** After interacting with the save points enemies in the level will reset.
- **Shop system**

## Additional Links

Lights out puzzle helper : <https://daattali.com/shiny/lightsout/>