

Effie Sampson

GDD

Miracle of The Mushroom King

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Overview

Concept

Miracle of The Mushroom King is simple wave-based fighter where the goal is to survive as long as possible. The player plays as a magical mushroom character utilizing spells, traps, and power ups as they fight to survive against waves of woodland creatures.

Target Platforms

Though this demo will only be available on PC, the full target platforms are as follows:

- PC
- Xbox Series X
- PS5

Genre

Wave-based hoard fighter.

Target Audience

Age: PG

Style is cartoony. Violence presented with no blood or gore. No offensive language.

Core Gameplay

Gameplay Loop

Phase 1: Player spawns and is given a base amount of money to spend on traps. They get 60 seconds to prepare for the first wave.

Phase 2: Enemies spawn in at set locations on the map. At the same time, player, and weapon power ups spawn at random within set locations. This phase ends when all enemies in the level are eliminated and phase one begins again to prepare for the next wave.

Mechanics

- The game will be in either 3rd or 1st person perspective.
- Player is given a starting amount of money to place traps.
- Each elimination is worth a set amount of money.
- Power ups spawn randomly and are only available during phase two in order to encourage players to move around the map.
- Players can not store or hoard power ups, they will only be effective on pick up and not carry over.
- The player is given one basic weapon. (Power ups available but no other weapon)
- Traps can be placed anywhere within the play space, vertical or horizontally, using a drag and drop function.
- Traps will carry over through phases but are limited in the number of times they can be activated before they self-destruct.
- The player is to survive as long as possible and upon their death the HUD will display a high score.
- The number of enemies that spawn each round will go up in increments decided by the level design.

Larger enemies and different maps are planned for the wider game, but for this demo I will be focusing on one level and two enemy types.

Power ups *(Not all enhancements will be available in the demo.)*

Weapon power ups.

- Spray shot: Fire multiple bullets in a cone for a limited time.
- Missile shot: Limited bullets. One hit kill homing missile.
- Rapid fire: No cooldown on firing, holding down the button auto fires.

- Extra spell: Limited bullets, force push. To be used on any enemies in its path.

Player power ups.

- Speed Boost
- Shield
- Health
- Power Up Finder (To highlight power ups either on the map or HUD)

Other power ups.

- Extra spell or throwable, one-time use. Cloud kill. Damaging any enemies in its radius.

Traps (*Not all traps will be available in the demo.*)

- Freeze Trap: Holds enemies in place for a short time. Limited uses.
- Explosive floor mine: Damages enemies within the radius of explosion. Limited uses.
- Explosive air mine: As above but floating to target flying enemies.
- Turret: Fires missile bullets similar to weapon upgrade. Limited ammo.
- Whirlwind: Traps enemies and send them off course. Limited uses.
- Power up spawner: Spawns random power ups in a location chosen by the player. Limited power ups.

Enemies (*Not all enemies will be available in the demo.*)

- Flying enemy: Bird, basic attack function, spawns every wave.
- Ground enemy: Squirrel, basic attack function, spawns every wave.
- Boss enemy: Ogre or troll, large max health, has special attacks.

Controls (PC, Xbox, PS)

Phase one controls.

- Movement: WASD/joy sticks.
- Placing traps: Left mouse drag and drop, or D-pad selection joy sticks to control “X” or “Square” to confirm placement.
- Skip phase: Mouse click on button, “B” or “Circle”.

Phase two controls.

- Movement: WASD/joy sticks.
- Jump: “space bar”, “A” or “X”.
- Fire weapon: “Left Mouse” or “Right trigger”.
- Pause menu: “Esc” or “Start”.
- Fire special bullet: “E”, “X” or “Square”.

Saving and loading

The player will not be able to save mid game, the game will auto save on the player’s death.

The player can pause the game and quit without saving.

Plot & The World

Plot

The player controls a sentient mushroom who is using magic to protect their woodland home from hungry woodland creatures who would very much like to nibble them.

Setting

The game will feature multiple maps in a woodland cute, homely, woodland setting. Level design will focus on creating choke points and verticality. Each setting will be a woodland area, but buildings and structures will vary to show how vast the mushroom’s villages are. The environments should show the area as “lived in”, all story is told through the environment.

Art and Music

Art Style

Fun, colourful and cartoony low poly meshes. Without any narrative for the player to follow directly, the art and environment will hint at the backstory by including areas where the mushrooms eat, sleep and live.

Music

- Title/Menu Music
- Game End Music

Music will be uplifting and fun. Though the game loop is to eliminate enemies, this is not to feel like a violent endeavour. The feel of the game is light-hearted and comedic with the player being a sentient mushroom fighting to not be nibbled on.

Sound effects/Foley

- Player Hit
- Enemy Movement (Looping, proximity based)
 - Bird
 - Squirrel
 - Ogre/Troll
- Fire Weapon
 - Normal
 - Special
 - Missile
- Next Round Indicator
- Power Up Nearby (Looping, proximity based)
- Countdown Timer Beep

Technical Details

Engine

The game will be built within Unreal Engine 5.3 using blueprints with no plan to use C++ at this point.