

# *Hippity's Hop* **Game Design Document (GDD)**



**'LET'S HOPPITY!!'** – Hippity (Kyle O'Dell)

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## Game Development Team Members

PRODUCER  
Kyle O'Dell

PRODUCTION MANAGER  
Kyle O'Dell

PRODUCTION COORDINATOR  
Kyle O'Dell

GAME DESIGNERS  
Kyle O'Dell

SYSTEMS/IT COORDINATOR  
Kyle O'Dell

PROGRAMMERS  
Kyle O'Dell

TECHNICAL ARTISTS  
Kyle O'Dell

AUDIO ENGINEERS  
Kyle O'Dell

UX TESTERS  
Kyle O'Dell

# 1 Game Overview

Title: Hippity's Hop

Platform: PC Standalone

Genre: 3D Platformer / Adventure

Rating: (10+) ESRB

Target: Casual gamer (aging from 12 - 30)

Release date: May, 2020

Publisher: MSO Productions

Hippity's Hop is a 3D platformer and adventure game where the Player has to help Hippity find his grandfathers lost orbs, requiring the player to overcome obstacles, survive enemies, and solve puzzles.

## 2 High Concept

Hippity's Hop places the player initially in an expansive terrain where the player can explore to discover lost orbs. Along the terrain are small fast enemies who will attack the player, and the player must evade their attacks due to the lack of weapons.

## 3 Unique Selling Points

- Unique story
- Multiplatform across Windows/Linux/Mac OS

## 4 Platform Minimum Requirements

PC, MAC AND LINUX STANDALONE

Build for modern PC.

## 5 Competitors / Similar Titles

Petscop by Garalina

## 6 Synopsis

Landing in an unknown terrain, it's up to you to explore and find out what is happening. Upon entering a house nearby, you meet Hippity, and unusual but happy, nice character who is

asking you a favor to find his grandfathers lost orbs. He says they mean a lot to him. Go on an adventure to find his lost orbs, but also discover the truth about Hippity.

## 7 Game Objectives

Proceed through the various maps, surviving the attacks of Mini-Enemies, and try to find all of the orbs, puzzles, and fights.

## 8 Game Rules

Player has no means of fighting, must evade attacks and even sometimes use the environment to fight. Player must find certain number of orbs to proceed through certain areas and levels.

## 9 Game Structure

Main Menu → FirstLevel → Find Ten Orbs → SecondLevel → Complete Puzzle → FinalLevel → Beat Boss → Credits

If HP = 0 → Gameover screen

## 10 Game Play

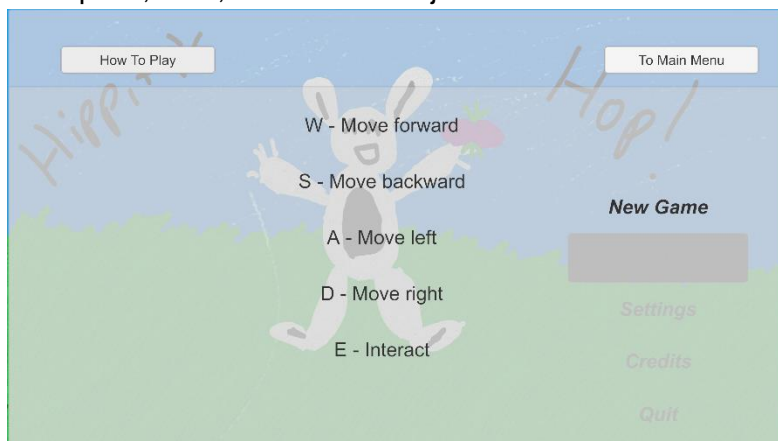
### 10.1 Game Controls

WASD – Move player

Space -- Jump

Shift(Hold while moving) -- Sprint

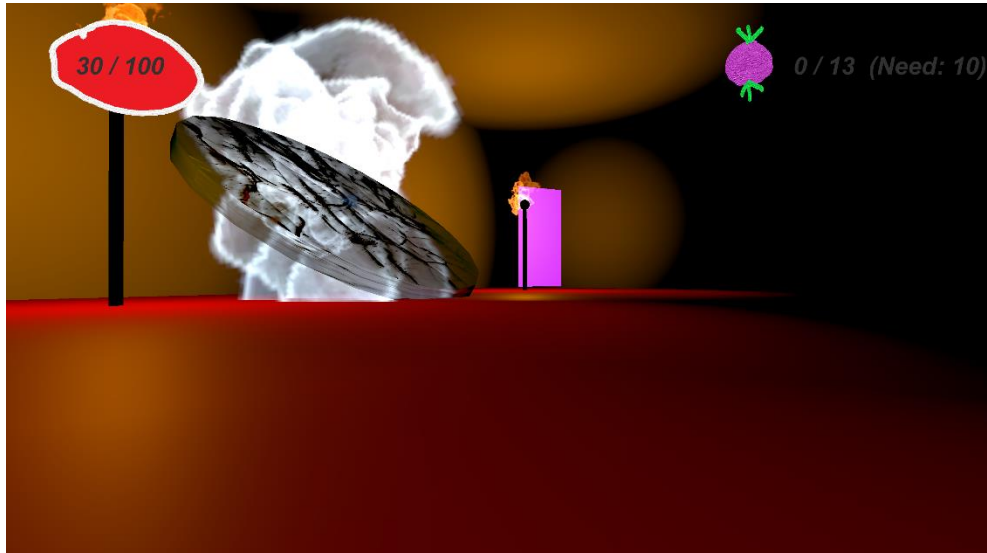
E – Speak, read, interact with objects





## 10.2 Game Camera

Camera focuses on players first person perspective.



### 10.2.1 HUD

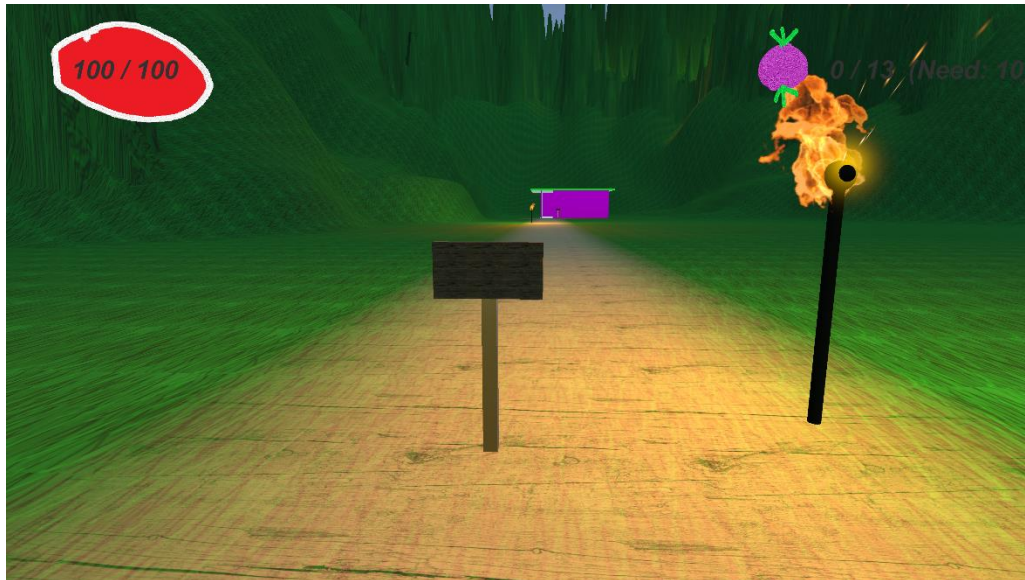
Player HP -- Informs player of remaining health

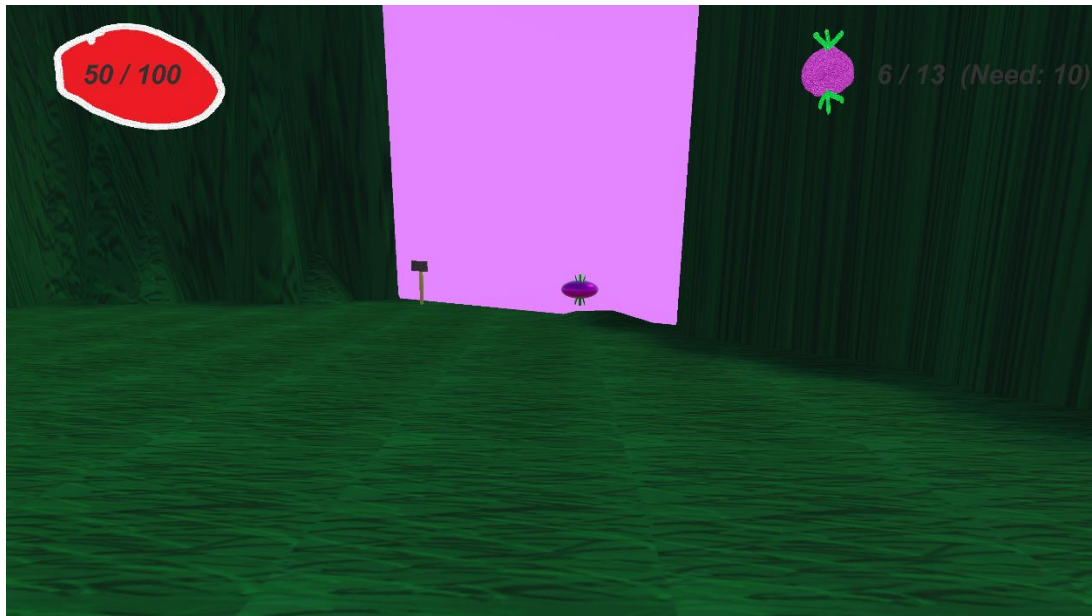
Inventory -- Displays players orb count



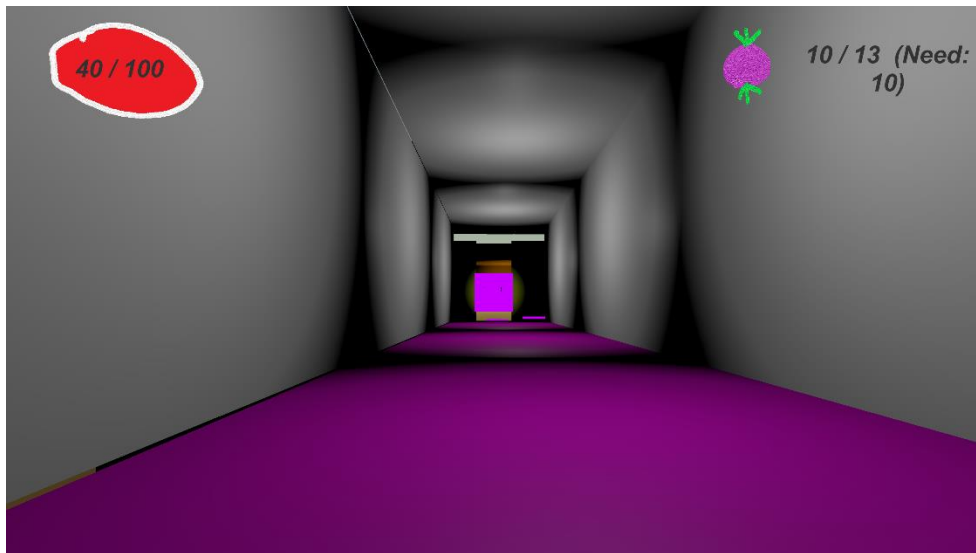
## 10.2.2 Maps

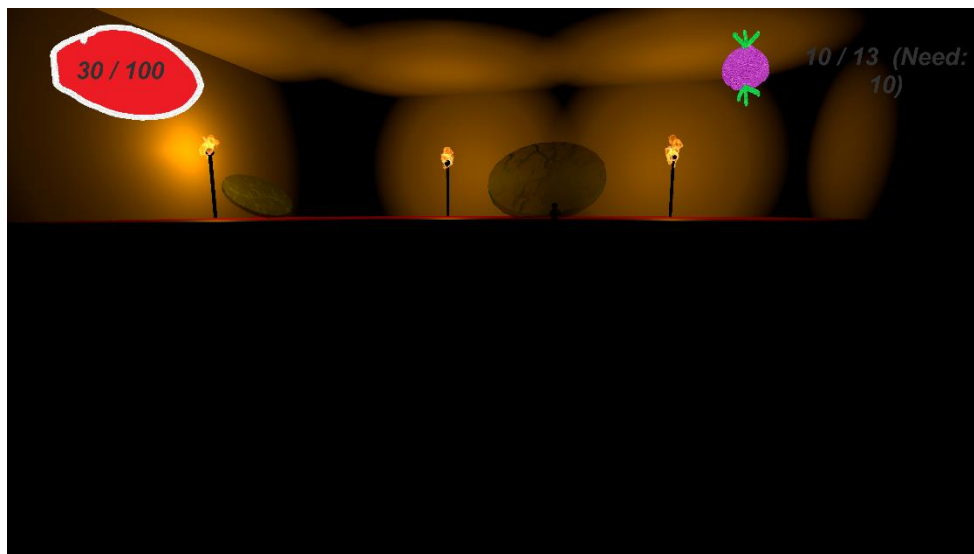
### First Level





## Second Level





### Third Level





# 11 Players

## 11.1 Characters

The main character is you! This game is played from your own perspective.

## 11.2 Metrics

Player Metrics:

Speed: 13

Sprint Speed: 20

Max Health: 100

## 11.3 States

N/A

## 11.4 Weapons

The main character has no weapons.

# 12 Player Line-up

Hippity



## Mini-Enemies



# 13 NPC

## 13.1 Enemies

### Mini-Enemies

- HP = N/A
- Speed = 18
- Damage = 10
- Cool down = .1 seconds

### Boss (Hippity)

- HP = 300
- Speed = 15
- Damage = 15
- Cool down = .1 seconds

### 13.1.1 Enemy States

Mini-Enemies – Sprinting fast, the little guys act sporadic, arms flying in every direction. They cannot die.

Hippity – Generally not aggressive, until the end. Hippity has a lot of dialog.

### 13.1.2 Enemy Spawn Points

Mini-Enemies spawn throughout the terrain at predetermined locations.

Hippity spawns as an enemy on the final stage.

## 13.2 Allies / Companions

### 13.2.1 Ally States

Hippity's Son – Dancing/Riding Cowboy

Step Dancing (when 4 orbs obtained)

Full spread dancing (when 10 orbs obtained)

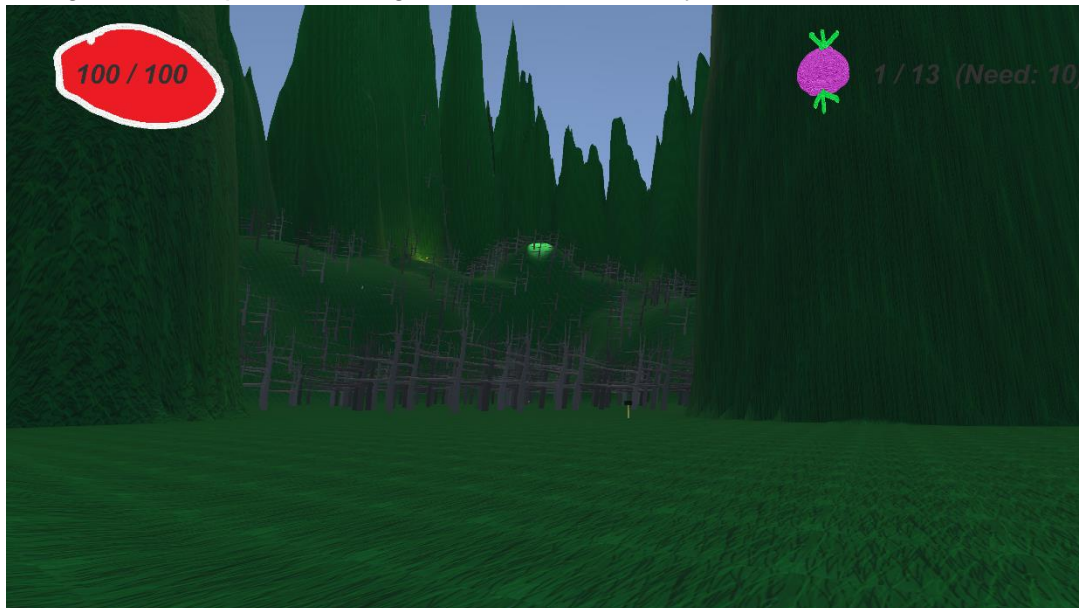
### 13.2.2 Ally Spawn Points

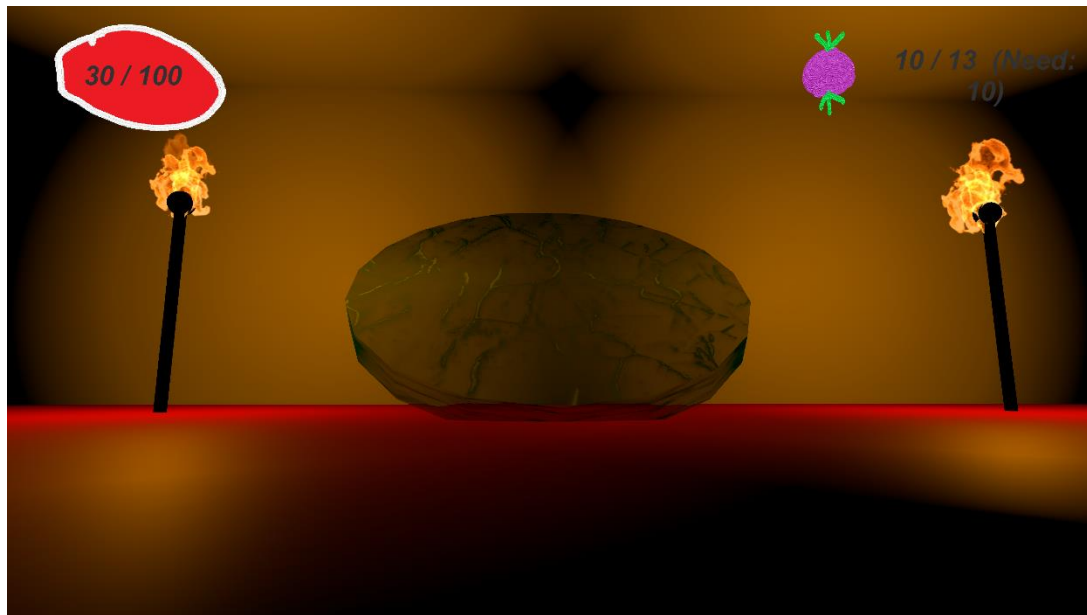
Hippity's Son appears in Hippity's house in the first level, in the orb room in the second level.

## 14 Art

### 14.1 Setting

The game takes place in a large terrain, lab, and fiery arena.





## 14.2 Level Design

The first level is a collector state, the player has to collect at least ten orbs while avoiding the attacks of mini-enemies.

The second level is a platform stage, where the player must jump to various points to complete a simple puzzle and avoid falling in a pit full of enemies.

The final level is just a boss fight where the player must use the environment to defeat the boss.



## 14.3 Audio

CreditsTrack – Music – Plays during credits and first level

3dintrotrack – Music – Plays in background of main menu

Level2 – Music – Plays in background of second level

Finalbossfight – Music – Plays in background of final level

FULL2-1 – FX – Plays when player walks near waterfall in first level

greenLightSound – FX – Plays when player turns on torches in second level

HealingSound – FX – Plays when orbs are picked up

Hit-sound – FX – Plays when player gets hit

BossDying – FX – Plays when final boss dies

## 15 Procedurally Generated Content

N/A

### 15.1 Environment

N/A

### 15.2 Levels

N/A

### 15.3 Artificial Intelligence NPC

N/A

### 15.4 Visual Arts

N/A

### 15.5 Audio

N/A

### 15.6 Minimum Viable Product (MPV)

- Built for the PC platform

## 16 Wish List

- More NPCs
- More levels
- Larger story
- Character development
- More items
- More weapons
- More abilities
- Skills

## **Bibliography**

Kyle O'Dell

Department of Computer Science, San Diego State University

CS 583: 3D Game Programming

Professor Price

April 28, 2020

## **References**

Thirslund, A. [Brackeys]. (2017, July 23). How to make a Dialogue System in Unity [Video file]. Retrieved from [https://www.youtube.com/watch?v=\\_nRzoTzeyxU&t=593s](https://www.youtube.com/watch?v=_nRzoTzeyxU&t=593s)

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[Unity Technologies] (2019, November 15). Unity Particle Pack 5.x. Retrieved from <https://assetstore.unity.com/packages/essentials/asset-packs/unity-particle-pack-5-x-73777>

## **Original Assets**

Soundtrack:

Main Menu Theme – Written and produced by Kyle O'Dell

Credits theme – Written and produced by Kyle O'Dell

First level theme – Written and produced by Kyle O'Dell

Second level theme / GameOver track – Written and produced by Kyle O'Dell

Final level theme – Written and produced by Kyle O'Dell

#### Sounds:

Player hit sounds – recorded by Kyle O'Dell

Boss death sounds – recorded by Kyle O'Dell

Torch Activation sound – recorded by Kyle O'Dell

Waterfall sound – recorded by Kyle O'Dell

Picking up orb sound – recorded by Kyle O'Dell

#### 3D Models:

House – Made by Kyle O'Dell using Unity

Sign – Made by Kyle O'Dell using Unity

Orbs – Made by Kyle O'Dell using Unity

Hippity – Made by Kyle O'Dell using Unity

Mini-Enemies – Made by Kyle O'Dell using Unity

#### 2D Artwork:

Main Menu background – Kyle O'Dell

Grass texture for terrain – Kyle O'Dell



## **Play Testers**

Kyle McLain Kane

Norman Chau

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