### Slime Dungeon Game Design Document (GDD)





'A slimy dungeon escape mission'

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# Game Development Team Members

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UX TESTERS

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## 1 Game Overview

Title: Slime Dungeon Platform: PC Standalone

Genre: Survival, Puzzle-platformer

Rating: (10+) ESRB

Target: Casual gamer (aging from 12 - 30)

Competitive gamer Release date: May 2022

Publisher: RyZaBreMann Studios

Description: Try to escape the dungeon by finding keys located in each room to unlock the next door while some enemies try to stop you from leaving.

# 2 High Concept / Genre

High Concept: Escaping the dungeon Genre: Survival, Puzzle-platformer

# 3 Unique Selling Points

- Slimes come in different variations with different abilities
- Keys can be found by moving blocks, parkour, breaking objects, and killing slimes

# 4 Platform Minimum Requirements

CPU: Intel Core i7-1265UE, AMD Ryzen 7 5700X

RAM: 8 GB

OS: Windows 10 64-bit, MacOSX10.11 Big Sur

GPU: GeForce GTX 3060

# 5 Competitors / Similar Titles

- Minecraft
- Call of Duty zombies

# 6 Synopsis

You wake up and find yourself inside of a dungeon with only a sword provided to you. You try to open a door to figure out what is going on, but it is locked. You find a key that unlocks the door.

Then, you realize you are not alone in the dungeon, and you must fend off the enemies trying to attack you in order to stay alive and escape the dungeon.

# 7 Game Objectives

- Find keys to unlock the doors
- Kill the enemy slime

## 8 Game Rules

- You are given 3 lives to survive as long as you can
- When you open a door, your health is fully regenerated, but any remaining slime in the room will not despawn
- There is a cooldown for how frequently you can damage a slime
- If player falls into hole, they are respawned with less health

## 9 Game Structure

- Game only ends when the player runs out of lives
- Each room randomly generates where the key will spawn
- Key can spawn in slimes, on top of blocks, or in swinging objects
- Slime damage and health increases with increase in game difficulty chosen by player

## 10 Game Play

### 10.1 Game Controls

- Pressing mouse1 will swing the sword
- Pressing shift will cause the player to sprint
- Holding mouse2 will cause the player to pick up a block
- Pressing W will move the player forward
- Pressing A will move the player to the left
- Pressing S will move the player backwards
- Pressing D will move the player to the right

### 10.2 Game Camera

- Camera follows a first-person point of view of the player

### 10.2.1 HUD

- Displays the players health, the number of lives, and whether or not the player has a key to open the door

### 10.2.2 Maps

- Map contains unlimited rooms with the population of each room being random

# 11 Players

### 11.1 Characters

- Character is the person trying to escape the dungeon
- The player can choose the name of the character they will play as and the color of the character

### 11.2 Metrics

Health: 100Lives: 3Damage: 34

## 11.3 States

- Alive
- Dead

## 11.4 Weapons

- Sword

# 12 Player Line-up

- One character who can be many different colors with any name the player chooses

## **13 NPC**

### 13.1 Enemies

- Basic slime

- Speed slime

### 13.1.1 Enemy States

- Alive
- Dead

### 13.1.2 Enemy Spawn Points

- Can spawn anywhere in the room

## 14 Art

## 14.1 Setting

- Dungeon

## 14.2 Level Design

- Various rooms with different blocks, objects, enemies, and platforms spawning in different places in each room
- Key could spawn on platforms, behind blocks, in slimes, or in dangling objects

### 14.3 Audio

- Background dungeon music

# 15 Procedurally Generated Content

### 15.1 Environment

## 15.2 Levels

- The rooms spawn in as the player moves closer to them

## 15.3 Artificial Intelligence NPC

- The enemies will go around holes in the rooms

### 15.4 Visual Arts

### **15.5** Audio

- Key sound effects
- Slime sound effects

## 15.6 Minimum Viable Product (MPV)

- Can generate a few levels and some enemies to test out the interactions between player and enemies as well as see how difficult it is to escape each room

## 16 Wish List

- More enemy variants
  - > Bomb slime that explodes after being near you for a certain amount of time
- High score tracker
- More puzzles to find the keys

### 17 Bibliography

YouTube Tutorials:

Collider and trigger tutorial:
https://www.youtube.com/watch?v=6C4KfuW2q8Y

- Basic materials tutorial:

https://www.youtube.com/watch?v=V72pMtqMgFk

- 3D tile map tutorial:

https://www.youtube.com/watch?v=uIFc6p3hQzQ

- Player movement: https://www.youtube.com/watch?v=\_QajrabyTJc&t=848s
- Blender rigging tutorial: https://www.youtube.com/watch?v=XkiWBSSuxLw
- Animator setup:

https://www.youtube.com/watch?v=vApG8aYD5al

- Animation layers and masks:

https://www.youtube.com/watch?v=-SAnr8-Xfgg

- Adobe Substance 3D Painter export:

https://www.youtube.com/watch?v=\_4ULQ95njmQ

- Adobe Substance 3D Painter masking: https://www.youtube.com/watch?v=\_j27AS0VQOw
- Adobe Substance 3D Painter intro: https://www.youtube.com/watch?v=mv6pg1O9vEQ&t
- How to make UV map Blender: https://www.youtube.com/watch?v=AnRQhH3fEDY
- How to attach weapon to player hand: https://www.youtube.com/watch?v=S\_USClc\_r5c
- How to Nav Mesh: https://www.youtube.com/watch?v=FkLJ45Pt-mY
- How to particle effects: https://www.youtube.com/watch?v=FEA1wTMJAR0

#### Audio:

- Dungeon Music: by Fantasy Musica @ https://opengameart.org/content/dungeon-04
- Key and slime sound effects: by artisticdude @ https://opengameart.org/content/rpg-sound-pack

#### Animations:

- Movement animations: https://assetstore.unity.com/packages/3d/animations/basic-motions-free-154271

### Main Menu Title:

- Font generated @ https://www.picturetopeople.org/

#### Other:

- Adobe Substance 3D painter used for texturing door, key, and sword











