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Game Design Document

Slime Busters

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Introduction

This document specifies the design for the gameplay, graphics, sound, and story of the game Slime Busters, based on design made by IPCA students Pedro Almeida, Ana Francisca, and Bruno Machado.

The following is a proposal for an action game developed in unity, targeted at pc and consoles.

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Game Overview

A slime infestation has occurred, and it's up to you to stop it! Armed with a special vacuum cleaner, the player must find and catch all of the various types of slimes hiding in the various levels throughout the game.

With a Twin stick Controller layout, the player moves around the level, followed by a top-down looking camera. By using the mouse or right analog stick, they can point the vacuum cleaner in their desired direction and suck in the slimes.

Gameplay

The main gameplay loop is finding and catching slimes in an open map. Each map has a set number of slimes that will be spawned for the player to catch.

Game over happens either when the player catches all remaining slimes or dies by reaching 0 health.

Player

The main character is controlled with twin stick controls, the left stick(or wasd) controls movement while the right stick(or mouse) controls where to aim and use the vacuum cleaner at. The player is also able to jump to overcome obstacles.

The player has 3 health in total. When the player touches a slime, they are launched back, lose health and are granted 3 seconds of invincibility. Health can be recovered with health pickups.

The vacuum cleaner has energy that is spent when the player uses it and must be recharged in stations, there are 2 to 3 stations per map and to use them, the player must stand on them while the energy recharges over time.

The player can sprint by spending stamina to move faster, this allows the player to quickly travel the maps and reach their desired location.

Resources:

Health

Stamina

Vacuum cleaner's Energy

Slimes

Slimes come in various colours and formats, Small blue slimes being their basic one

Slimes spawn in fixed locations and roam the area, when the player gets close, they will enter an alert state and start running away. The slimes are able to jump on top of certain objects or jump from platform to platform to more quickly escape the player.

The Slime spawners will spawn slimes if there aren't any other slimes or the player in the vicinity as long as the max map slime number hasn't been reached.

The slimes each have their own health value, that runs out when they are being vacuumed by the player. If their health is not full, then they will start regenerating health when not being vacuumed.

Slime Types:

- **Blue slime** - Basic type, 20 health, regenerates 1 health per second. Runs when the player gets close.
- **Red Slime** - Aggressive type, same stats as blue one but runs towards the player when they see them
- **Yellow Slime** - Fast type, 15 health, regenerates 0.5 health per seconds, runs away at high speed from the player

Maps

The maps will feature various corridors connected between themselves with some rooms in between. These levels will be filled with various props to further complicate movement and try to make the chasing mechanic more engaging.

Each one of the maps has various slime spawners, some slimes and at least 1 Energy Station.

Pickups

Health pickups - picking up one of these will give the player 1 health.

Small Health pickups - 10% chance of being dropped by a slime upon being caught, picking up 4 of these grants 1 health to the player.

HUD

The hud shows the player's health, Vacuum energy and health fragments. It also shows the number of remaining slimes in the level.

On the floor, below the player, there is a compass that points to the nearest slime whenever there isn't one in the vicinity, this helps the player find new slimes to catch.

Slimes show a health bar above their head if their health isn't maxed.

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Story

The slimes have escaped from the ranch!

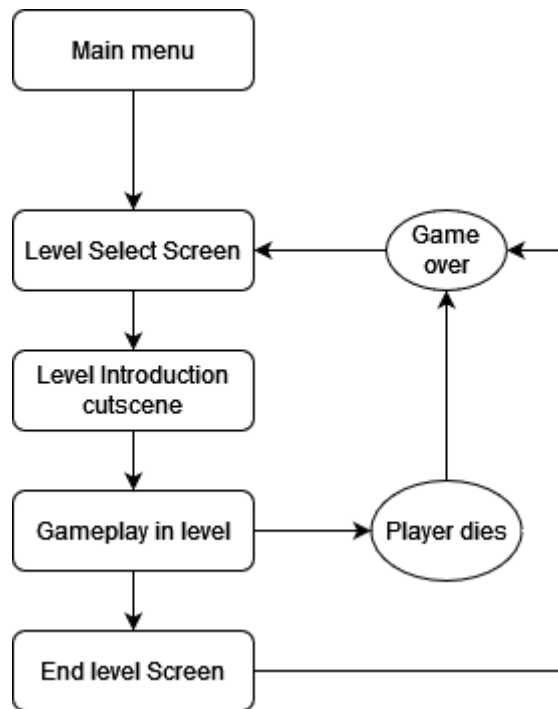
After a stormy night, the ranch's door was left open and all the slimes ran away, causing havoc everywhere they go. It's now up to the player to retrieve them.

Graphics

Graphics will be cell shaded without textures, instead opting for flat colours with a 2-step toon shader.

Game FlowChart

The following is the Game's Flowchart, showing the available menus.



Gameplay FlowChart

The following is the Gameplay's Flowchart showing how a typical level flows after selecting it from the level select screen.

