289106 Introduction to Game Development

Game Design Document- Red Ball Run

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Feedback from first playtest consisted of mainly the same elements across all the different playtesters:

* More colour diversity required.
* Some pitfalls were narrow enough that with the right speed the player could run over them without falling.
* Directional indicator to guide the player.
* Enemy diversity.
* Everyone liked the secrets.

Though I did leave the colour diversity plain intentionally to focus on other elements primarily, the visuals were bland, and many objects didn’t stand out as they should. To fix this I gave the floor a blue-grey colour to allow the white gun-barrels on the player and enemies to stick out, as well as a dark grey on the walls (except secret and breakable walls for now) to better differentiate between wall and floor. Down the line I’ll revisit adding more colour. In order to sort out the narrow pitfalls I’ve redesigned the ones in which the area revolves heavily around immediate pitfall, in order to avoid these potential ‘jumps’. In order to avoid the player getting lost I’ll be looking into adding arrows or some other directional marker on the ground to guide the player through the level, and then revisit towards the end of development and decide whether or not a minimap will be necessary.

The enemy diversity will arrive with the following maps once completed. I’ve also added a super secret invisible wall that will allow the player to shortcut from near the beginning of the level, to near the end, in case a player dies say within the last room and reeeeally doesn’t want to go through the whole level again (though that **is** the price they pay for falling.)

# Game Concept

## Tagline/Mantra

Top-down, Bullet-Hell, From A to B

## Inspirations

Binding of Isaac. Portal. Geometry Wars.

## Gameplay Pillars

|  |  |  |  |
| --- | --- | --- | --- |
| **Shooter** | **Exploration** | **Difficult** | **Puzzles** |
| **As a topdown shooter this is a given. Though not needed Level 1, the following levels revolve around this heavily. Different weapons modes for diversity of gameplay.** | **Pickups, secret walls, upgrades and / or weapons to uncover, shortcuts. For the benefit of adding some flavour to the linear design the levels will follow (go from A to B.)** | **Lots of play testing required in order to tune difficulty without ruining the fun; such as enemy fire rate, pitfall and turret placement, respawn location etc.** | **Logic puzzles to be introduced to either block the journey forward, or as side rooms for extra resources.** |

# Core Mechanics

- WASD Movement to navigate the mazes, dodging enemy projectiles and avoiding pitfalls.

- // May be interesting to check out a dash mechanic, but so far not necessary.

- Mouse1 – standard periodical fire. Mouse2 – torrent fire (either to be unlocked, or only lasts a short period of time after grabbing a pickup.

- // Wish to look into creating an inventory / gun reel, allowing the player to switch to different forms of attack (e.g. pistol, machine gun, grenade launcher etc.)

- Pitfalls send player back to the **beginning** of a level, forcing the player to prioritise avoiding falls.

- // Soon to introduce a health system (e.g. 100hp, every hit taking via enemy projectiles reduces 25hp. Medkits to be introduced as well.)

- Collectable pickups. A certain amount every level. Collect them all to unlock a new gun / restore hp / gain achievement (not sure yet.)

- Numerous secrets scattered around the maps. Breakable walls and fake walls, as well as challenge / puzzle rooms.

- Static turret enemies lvl 1. Moving and aiming enemies lvl 2. Lvl 3 either a combination of the two, or a boss fight.

- // Depending on how the map layouts come out, may introduce a minimap to prevent the player getting lost.

# Core Narrative

A simplistic narrative. You play as a red ball. Dodge or destroy the cubes before they destroy you. Watch turret setups and time your movements to get past unscathed. Consciously avoid pitfalls or run the risk of being reset to the beginning of the level. Explore as you go to uncover secrets such as shortcuts through the levels, or pickups to increase your arsenal, recover hp, or simply achievement collectables. Defeat the evil cube lord and be reunited with your beloved: a red ball with a bowtie.

Primary focus on gameplay design.

# Aesthetics

Visually a very simplistic design. Rough edges. Jagged shapes. Very geometrical. Don’t want to spend more time than necessary on complicated visuals or materials. Focus on strong colour to differentiate objects and guide the player.

Strong focus on audio design. Retro or Electro style BGM and SFX if possible. Sounds for everything possible:

- Weapon fire

- Falling

- Destroying destructible

- Gathering pickups

- Idle character noises

- Victory condition achieved

Finale cutscene would be cool if doable.