

Everybody Loves Rayguns (a.k.a the next Portal) [Working Title]

Simple GDD

First-Person 3D puzzle platformer

While exploring an abandoned robot factory, you discover a mysterious Raygun. After finding the Raygun and the research notes from an enigmatic inventor you decide to explore deeper into the factory using the Raygun's special properties to solve puzzles and traverse the factory to uncover the unusual story of the inventor.

Character Bios

Player

No personality. Only a camera for the player to control and experience the world through.

Enigmatic Inventor

You learn about the inventor through audio and video logs left at the robot factory you are exploring. The inventor is the one that created the Raygun and the robots being built at the factory. In the vlogs the inventor is always seen in shadow or is off screen, though we recognize a male voice.

The inventor will end being the final boss or last enemy, his head will be on a robot body. He has tragic romance subplot that I'm not certain of yet.

Rough Plot

TBD

Gameplay progression

- Explore the world without the Raygun
- Discover the Raygun and "meet" the inventor through a vlog
- Solve some puzzles with the first Raygun power, "Shrink Ray." Learn the mechanic
- Learn more about the inventor through audio and video logs, this will push the story forward
- Get the second Raygun power, "Grow Ray." Learn the mechanic through grow only puzzles, then integrate both the "Grow Ray" and the "Shrink Ray" in a puzzles together
- Get the third and final Raygun power, "Teleport Ray." Learn mechanic through teleport only puzzles, then integrate all three rays into puzzles
- Final part of the game has a boss fight with the inventor as a large robot

Gameplay Description

Both singleplayer and multiplayer modes will have the same base mechanics. The main mechanic will be first person movement and camera control, the player can jump and walk around the game world. Physics will affect the player, for example the player can fall off of object and can be hit by objects. All modes will also have the player wield a Raygun. The Raygun will have 3 types of effects on objects in the world, it can shrink, grow, and teleport objects that the player shoots at with the ray gun.

Notes about the Raygun mechanics:

The Raygun will have 3 firing modes, Shrink/Grow and Teleport. Each mode will have a primary and secondary fire. In the Shrink/Grow mode Shrink would be the Primary Fire and Grow would be the Secondary Fire. In the Teleport mode Teleport would be the primary fire and throwing a Teleport Beacon would be the Secondary Fire.

In the Shrink/Grow mode a target must first be selected and the Raygun's beam will lock onto it, losing line of sight will break the connection of the object to the gun.

In the Teleport mode the Beacon will be tossed like a grenade, with physics and an arc. The Teleport beam will be instantaneous and NOT lock on like the Shrink/Grow.

Shrink Ray:

The Shrink Ray, when fired at certain types of objects will shrink them, allowing the player to solve puzzles and affect the world around them. Shrinkable objects will have a minimum size where they cannot shrink past.

Puzzle examples:

1. Shrink a box to fit through a hole to hit a switch to open a door
2. Make an object smaller so that it weighs less (balance puzzles)
3. Make an object smaller so that it displaces less water and the water level decreases
4. Shrink enemy robots to disable them

Grow Ray:

The Grow Ray, when fired at certain types of objects will make the object grow, allowing the player to solve puzzles and affect the world around them. Growable object will have a maximum size where they cannot grow past.

Puzzle examples:

1. Grow a box to close a gap so the player can cross the level
2. Grow a box to create a shield between the player and the enemy
3. Make an object larger so that it displaces more water and the water level increases
4. Crush enemies with giant objects

Teleport Ray:

The Teleport Ray works with a teleport beacon. The player must attach the beacon to surfaces within the level. When the Teleport Ray is fired at certain types of objects, if the beacon is deployed, the object is teleported to the location of the beacon. Only 1 beacon at a time can be deployed. When a new beacon is deployed the old one is destroyed. The area around the beacon needs to have enough room to teleport the object that is selected. The beacon can only stick onto certain surfaces.

Puzzle examples:

1. Teleport an object onto a button
2. Teleport an object onto an enemy or an enemy into a pit
3. Use the Teleport Ray to move object into place to create platforms
4. Remove obstacles out of the way by teleporting them

Other Mechanics:

Other mechanics will affect the use of the Raygun.

- As stated previously the Teleport Beacon can only stick to certain surfaces.
- Only certain types of objects can be affected by rays (made of a special metal or material)
- There are special force fields that won't allow ray's to pass through
- Objects that have timers, they will grow or shrink back to regular size after a certain amount of time after being shrunk or grown
- Patrolling robots that can kill you if they spot you (some are made of the special material some are not)

Single Player

Single player will have set levels the length of the game should be somewhere between 30 mins - 1 hour. Single player will be focused on the story of the game and going through the story. The gameplay loop will be similar to Portal, Quantum Conundrum, and similar puzzle platformer games. The player enters a room and must solve the puzzle of the room to continue the game. Each room can give hints to the story and since there won't be any turning back the player must move forward. The end of the game has a boss fight that requires everything the player has learned to win.

Co-op/Multiplayer

The Co-op/Multiplayer will focus more on having fun with a friend. There are 2 modes possible, one a race/obstacle course mode and a 1 vs 2 asymmetrical mode.

The race/obstacle course mode will have 2 players compete with each other to collect flags in a maze-like warehouse. One flag at a time will spawn in a location on the map and the player's must race to capture it. They can stop their opponent by impeding them using the Raygun and messing up their path. The first one to capture 3 flags is the winner.

The 1 vs 2 mode would have 2 player working cooperatively against another player. The player that is on their own plays as the final boss of the single player campaign. The boss will be overpowered compared to the 2 other players. The goal of the game would be similar to the 1vs 1 mode, but instead the goal of the boss would be to kill the other 2 players. The 2 regular players must capture 5 flags to win.

Artistic Style Outline

There more simple the visuals and the UI the better. We are stuck with store bought assets so we don't have too much say in the art style, but simple is key. Maybe add a cel shading filter on top of everything.

The video logs should be live action videos that play on monitors.

The Raygun needs to have very visually distinct effects from one another. Objects that are selected to shrink/grow should have outlines.

Systematic Breakdown of Components

- Unity's networking system for the multiplayer
- A worldspace video display system
- First Person Controller
- A collision detection system if an object can grow or teleport into a location
- A targeting/lock-on system for the Shrink/Grow Ray
- AI for the enemies
- AI for the final boss
- A door system to connect puzzles to (door opens when a puzzle is complete)
- A save/load system to save the single player game
- A menu system to select the game mode

Asset Breakdown

Art Assets

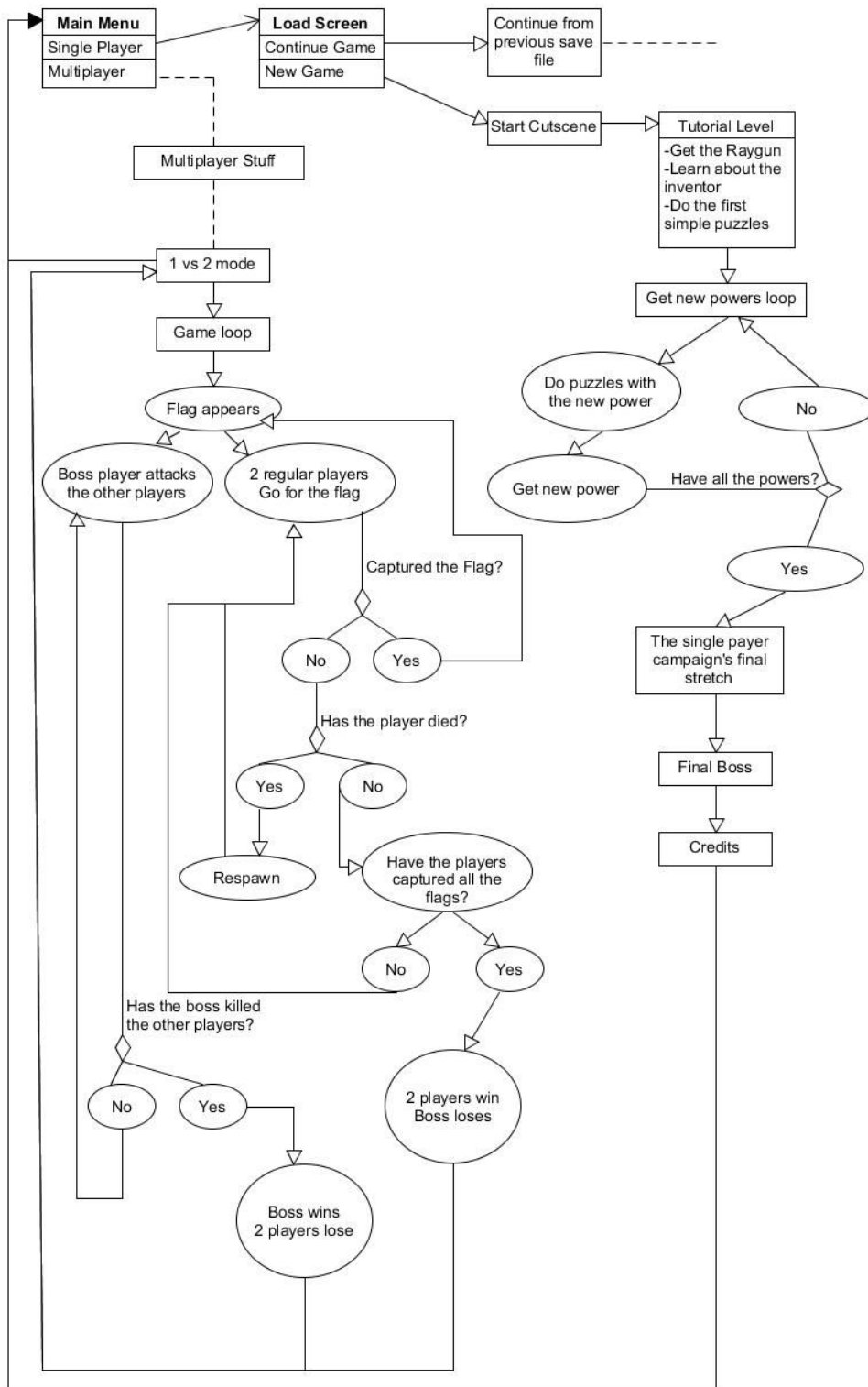
TBD

Needed: A cool Raygun, a cool robot enemy, a cool final boss robot enemy (these need animations), for multiplayer we need a player character with animations (so that there will be something for the other player to see)

Story Assets

We need to write a simple story and film a few vlogs

Suggested Game Flow Diagram



Suggested Project Timeline

TBD

Additional Ideas and Possibilities

TBD