

Escape Room 115

Virtual Reality escape room game with inspiration from Call of Duty: Black Ops
Zombies

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1. Game Overview

1.1. Game Concept

1.1.1. Virtual Reality escape room game based on Call of Duty: Black Ops Zombies.

1.2. Genre

1.2.1. Virtual Reality escape room game.

1.3. Target Audience

1.3.1. Enthusiasts of escape rooms with an emphasis in a dark, and zombies themed rooms.

1.4. Game Flow Summary

1.4.1. The player can move around by teleporting to any available part of the room and access a menu bar at any point from the Hud.

1.5. Look and Feel

1.5.1. Dark, wooden room.

1.5.2. Zombies themed

2. Gameplay and Mechanics

2.1. Gameplay

2.1.1. Game Progression

2.1.1.1. Figure out each puzzle and solve it to escape.

2.1.1.2. The player has 15 minutes to escape.

2.1.2. Mission/challenge Structure

2.1.2.1. Three puzzles.

2.1.2.2. Player must finish all three before being able to get out.

2.1.2.3. Must complete all puzzle before 15 minutes

2.1.3. Puzzle Structure

2.1.3.1. Record player changes the time on the clock to 1:15 when record is placed on the record player.

2.1.3.2. One of the hangars is a handle for the door.

2.1.3.3. Keypad next to the door is the final step to unlock the door

2.1.4. Objectives

2.1.4.1. Complete the three puzzles under the time limit.

2.1.4.2. Puzzles must be completed in order. First the player must turn on the music by placing the record on the record player this will also change the current time on the clock to 1:15 and should act as a clue to the final step, next the player must find the hangar which acts as door handle and place it in the corresponding socket in the door. Finally, the player must figure out the code for the keypad (115) by looking at the clock, or record art to be able to open the door and escape.

2.1.5. Play Flow

2.1.5.1. Gameplay is linear, meaning player must complete the steps in order, to be able to escape.

2.2. Mechanics

2.2.1. Physics – How does the physical universe work?

2.2.1.1. Some objects are interactable and others are static.

2.2.1.2. Objects that make the ray line white, are interactable.

2.2.1.3. Objects that don't change the ray line's color, are not interactable.

2.2.2. Movement in the game

2.2.2.1. Teleportation within the map space using the controller's touchpad.

2.2.3. Objects – how to pick them up and move them

2.2.3.1. Trigger button on the controller allows the player to pick up and interact with objects.

2.2.4. Actions

2.2.4.1. Player can interact with the objects within the room to escape.

2.2.4.1.1. The record on the cabinet can be picked up by pressing the trigger on the controller.

2.2.4.1.2. The hangar (doorknob) can also be picked up by pressing the trigger on the controller.

2.2.4.1.3. Doorknob is placed in the corresponding socket in the door.

2.2.4.1.4. Numbers on the keypad are pressed by pressing the trigger.

2.2.4.1.5. After all the tasks are done, the player can open the door by pressing the doorknob with the trigger button on the controller.

2.2.5. Screen Flow.

2.2.5.1. Main menu allows the player to change the volume of the game, hand orientation, and start the game.

2.2.5.2. When the game starts, it takes the player to a training area.

2.2.5.3. After the training is complete, the escape room will load, and the counter will start counting down.

2.2.5.4. The escape room has a limit of 15 minutes to complete, after all the three tasks are completed, a light will turn and shine at the door.

2.3. Game Options

2.3.1. Sound volume – lets the player choose their desired volume.

2.3.2. Hand orientation – the player can choose what orientation (left or right).

2.4. Easter Eggs

2.4.1. There are references to Element 115 in the flasks inside the cabinets.

2.4.2. If the flasks are broken or touched, certain sound effects will play.

3. **Story, Setting and Character**

3.1. Story and Narrative

3.1.1. Dr. Valley must escape his lab since, his deadly formula (Element 115) mixed with Nova 6 and is about to explode. The radiation from Element 115 made the room very dark and Dr. Valley must rely on the little light available, and his flashlight.

3.2. Game World

3.2.1. General look and feel of world

3.2.1.1. Medium sized dark wooden lab.

3.2.1.2. Claustrophobic feel for the player.

3.3. Characters

3.3.1. Main character – Dr. Valley, is chemist, and just found out a new mixture of substances; Element 115 and Nova 6, what he didn't realize beforehand, is that the result of that mixture results in a nuclear reaction, that triggers an explosion after 15 minutes of mixing it.

4. **Levels**

4.1.1. Two levels

4.1.1.1. Training Level

4.1.1.1.1. Player will learn how to interact with the rooms.

4.1.1.1.2. Variety of objects similar to the escape room.

4.1.1.2. Escape room

4.1.1.2.1. First, player must place the record on the record player, that will toggle the clock to change the time to 1:15.

4.1.1.2.2. Second, player must find the door handle and place it in the corresponding socket in the door

4.1.1.2.3. Finally, player must figure out the code (115) to the number pad to be able to escape.

4.2. Training Level

4.2.1. Provide the player with objects they will interact with in the escape room and teach how to use them.

5. Interface

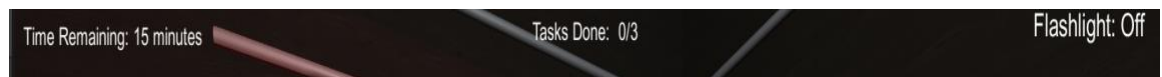
5.1. Hud includes:

5.1.1. Amount of tasks

5.1.2. Flashlight status

5.1.3. Time remaining

5.1.4. Settings icon



5.2. Control System

5.2.1. Trigger – interact with objects

5.2.2. Touchpad – look around and teleport

5.2.3. Turn on flashlight by picking it up.

5.3. Audio, music, sound effects

5.3.1. Record – Treyarch – 115

5.3.2. Training room – Avenged Sevenfold - Shepherd of Fire

5.3.3. Main menu – Call of Duty Black Ops Zombies Main Menu Theme

5.3.4. Audio when player loads into the escape room – White Noise

5.4. Help System

5.4.1. Highlight objects by shining a light at them after a certain time period.

6. **Technical**

6.1. Target Hardware

6.1.1. Oculus Go

6.2. Development hardware and software, including Game Engine

6.2.1. MacBook Pro 16 inch

6.2.2. Unity version 2019.4.9f1

6.2.3. Oculus Go

6.3. Network requirements

6.3.1. No internet connection required

7. Game Art – Key assets, how they are being developed. Intended style.



Figure 1 Cover Art for record

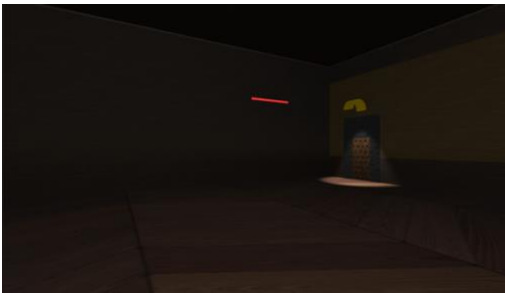


Figure 2 Dark wooden Room



Figure 3 Cabinet



*Figure 4 *Reference Clock*



Figure 5 Record Player

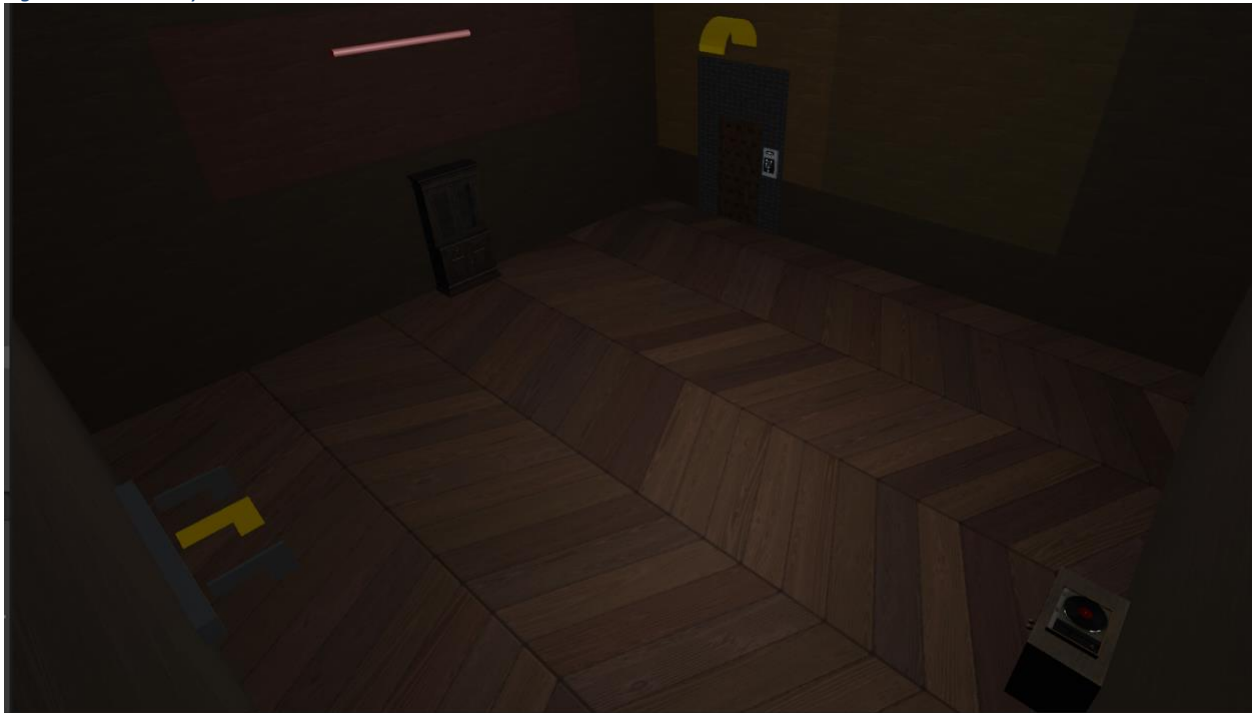


Figure 6 Room

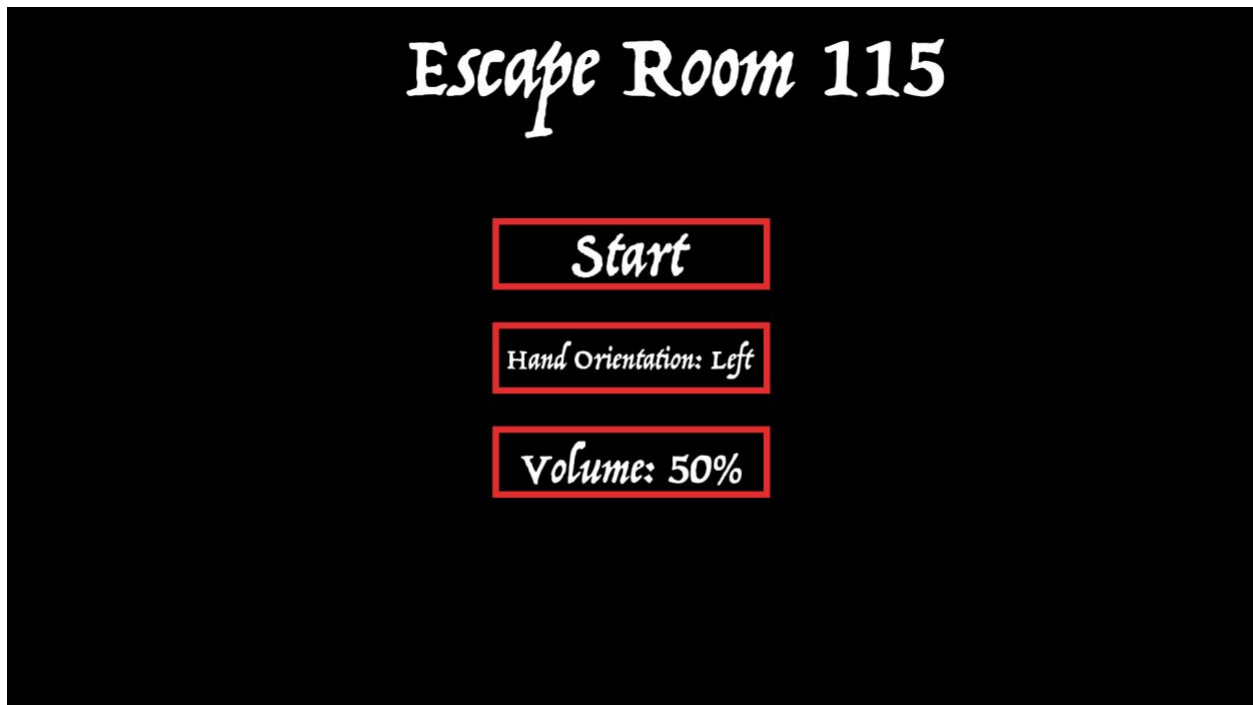


Figure 7 Start Screen

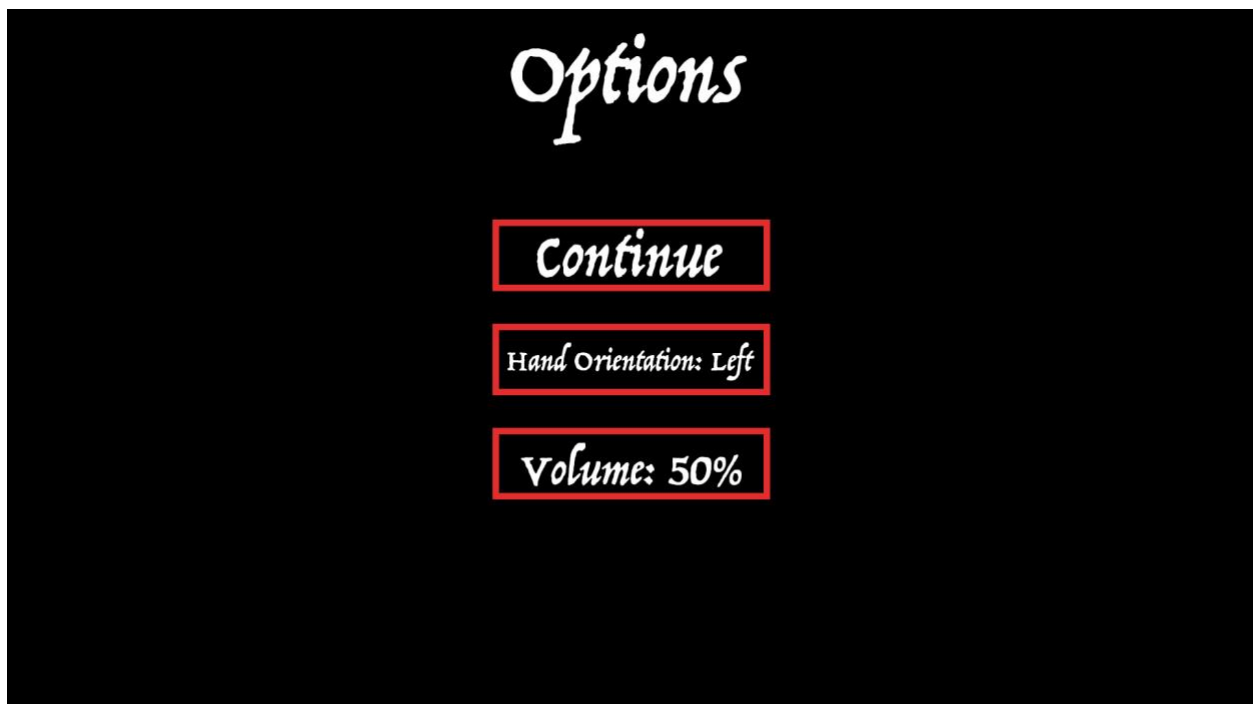


Figure 8 Options Menu