ESCAPE ROOM

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Group 6
GAME COMPONENTS

• Virtual Reality Headset
  • Oculus Quest 2

• Controllers
  • Oculus Touch
  • Controllers
  • Left
  • Right
## INTERACTIONS

<table>
<thead>
<tr>
<th>Grabbing</th>
<th>Collisions</th>
<th>Destroy</th>
<th>Functions</th>
<th>Score Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can grab objects like ball and cubes</td>
<td>Can use objects that can be grabbed and be thrown at any random object</td>
<td>Wall <strong>decoration</strong> and boxes are destroyed if succeeded in tasks.</td>
<td>Finishing tasks rewards player by opening doors and gives them access to different levels</td>
<td>tracks tasks score and is visible to player</td>
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**GAMEPLAY COMPONENTS**

**Animation:** Used Unity engine particle system to generate object break animations

**Sounds:** Used Dont Destroy on load with singleton object to keep the sound when user switches from one scene to another.
ASSETS USED

- Sci-Fi Styled modular Package
- Office Room Furniture
- Bowling Kagel and Ball
- Kenny Font Package
- Kenny Sounds
**MOVEMENT**

<table>
<thead>
<tr>
<th>Left hand controller:</th>
<th>Orientation</th>
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<tr>
<td>• Joystick helps player navigate in the room</td>
<td>• VR headset tracks the 3d orientation of player in the space</td>
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MOVEMENT

Left hand controller:

- Camera is attached to Player and as the player navigates in the space, the camera renders whichever objects that are in the field of view
- Box collider is used to detect collisions between various object as they interact
- Properties such as bounce, rigid body, kinematics, gravity and friction help simulate the actual physics properties perceived by humans as if they were in real world
- Mesh collider is used to create more close boundary detection for collisions
VR OBJECTS

Directional Lights

The Room

Terrain

Interactable Objects (Balls, Cubes)

Player (XR Rig)
DEVELOPMENT SCENES
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DEVELOPMENT SCENES
CHALLENGES FACED

- Collision Management
- Managing Collision Layers
- Object Grabbing
- Player Movement by holding objects in hand
FLOW OF GAMEPLAY

Main Menu -> Player Spawn in The Room -> Complete The Tasks -> Interaction with objects -> Game Over
GAMEPLAY

• Player can click on menu buttons using right controller trigger and beam.

• Objects can be grabbed by either hands using grip button.

• Objects can be thrown by swinging hands in that direction and then leaving the grip button.

• Complete the tasks on the dashboard to escape the room.
GAMEPLAY DEMO:

https://photos.app.goo.gl/TdEZ2YDZss37TMVX8
QUESTIONS...?