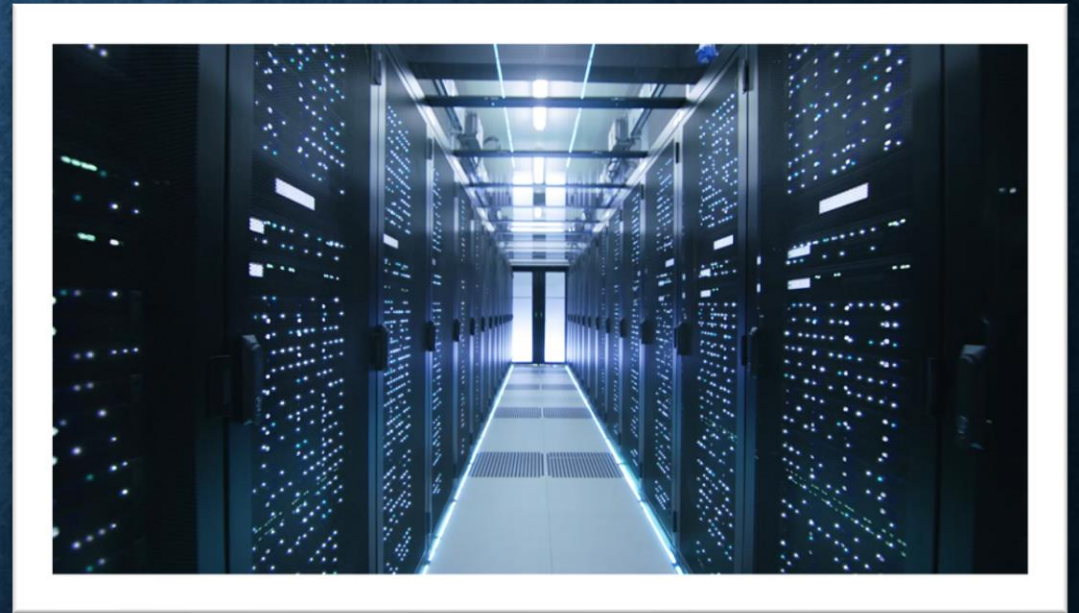


ESCAPE ROOM

- Ankur Yadav
- Nikhil Darwin Bollepalli
- Tarun Punhani

Group 6





GAME COMPONENTS

- Virtual Reality Headset
 - Oculus Quest 2
- Controllers
 - Oculus Touch Controllers
 - Left
 - Right

INTERACTIONS

Grabbing

- Can grab objects like ball and cubes

Collisions

- Can use objects that can be grabbed and be thrown at any random object

Destroy

- Wall **decoration** and boxes are destroyed if succeeded in tasks.

Functions

- Finishing tasks rewards player by opening doors and gives them access to different levels

Score Update

- tracks tasks score and is visible to player

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 Kegel and Ball

Kenny Font Package

Kenny Sounds

MOVEMENT

Left hand controller:

- Joystick helps player navigate in the room

Orientation

- VR headset tracks the 3d orientation of player in the space

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

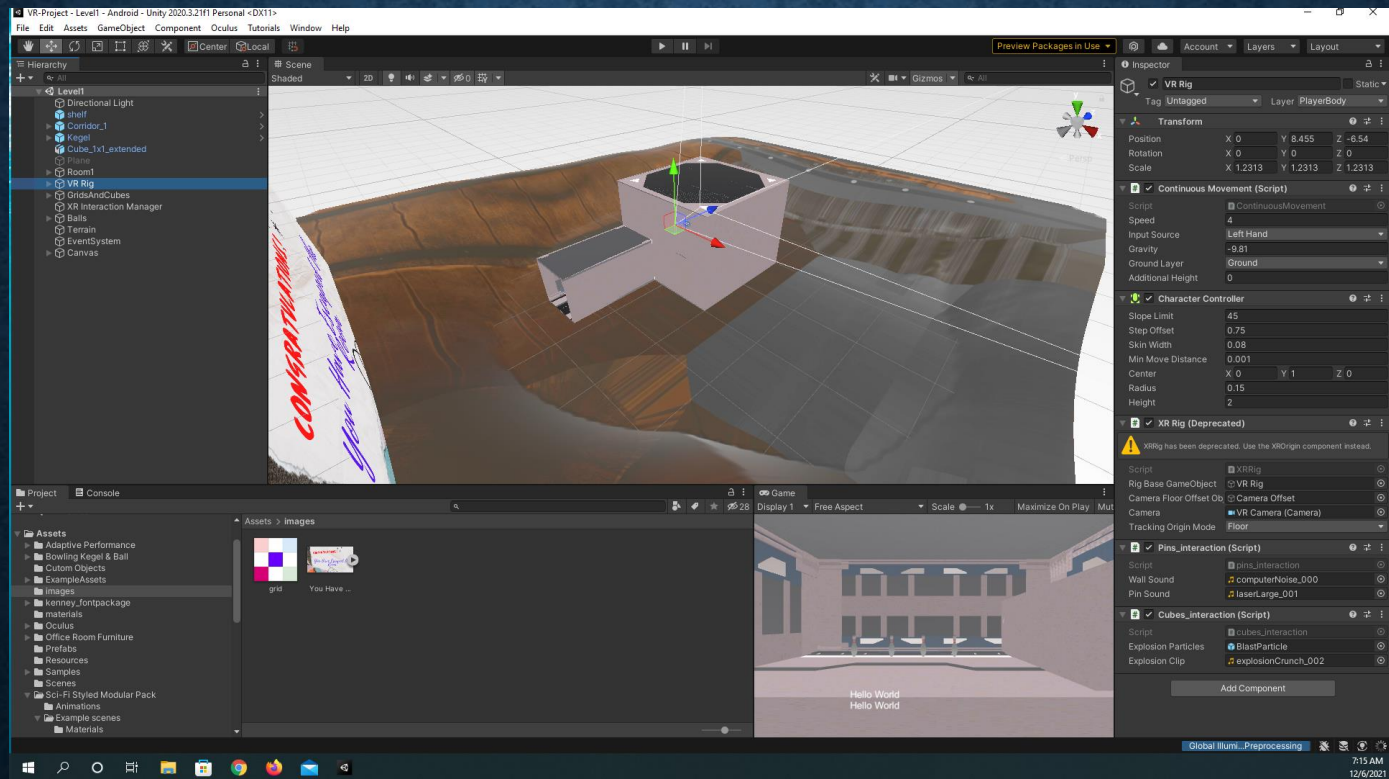
The Room

Terrain

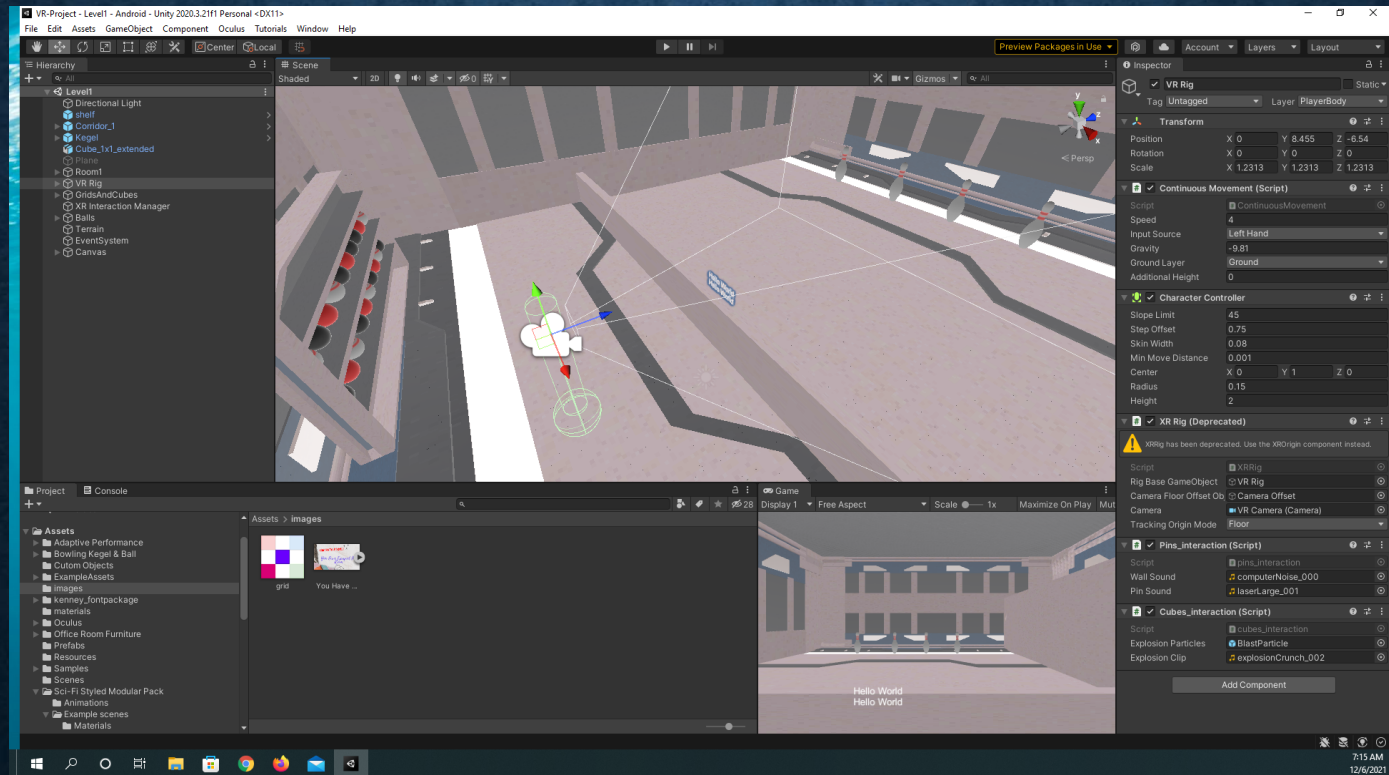
Interactable Objects (Balls, Cubes)

Player (XR Rig)

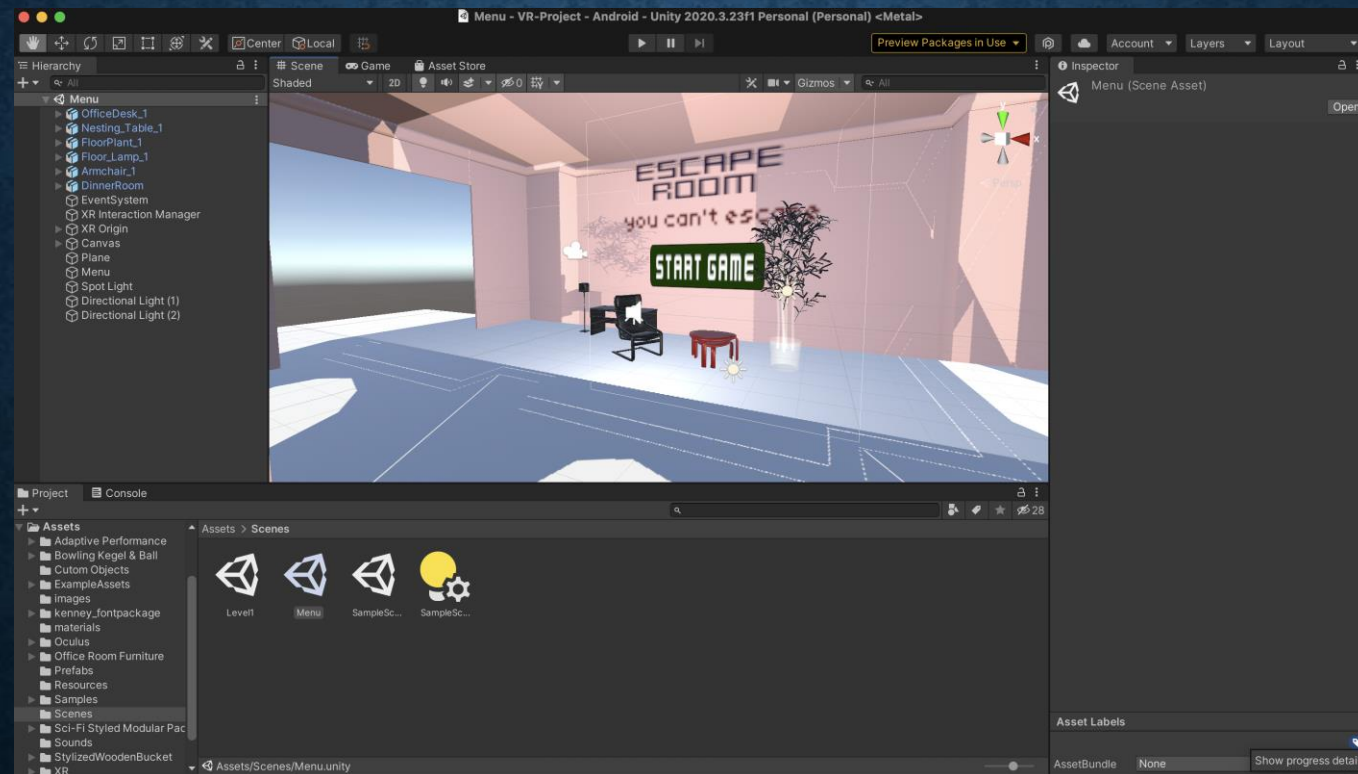
DEVELOPMENT SCENES



DEVELOPMENT SCENES



DEVELOPMENT SCENES



CHALLENGES FACED

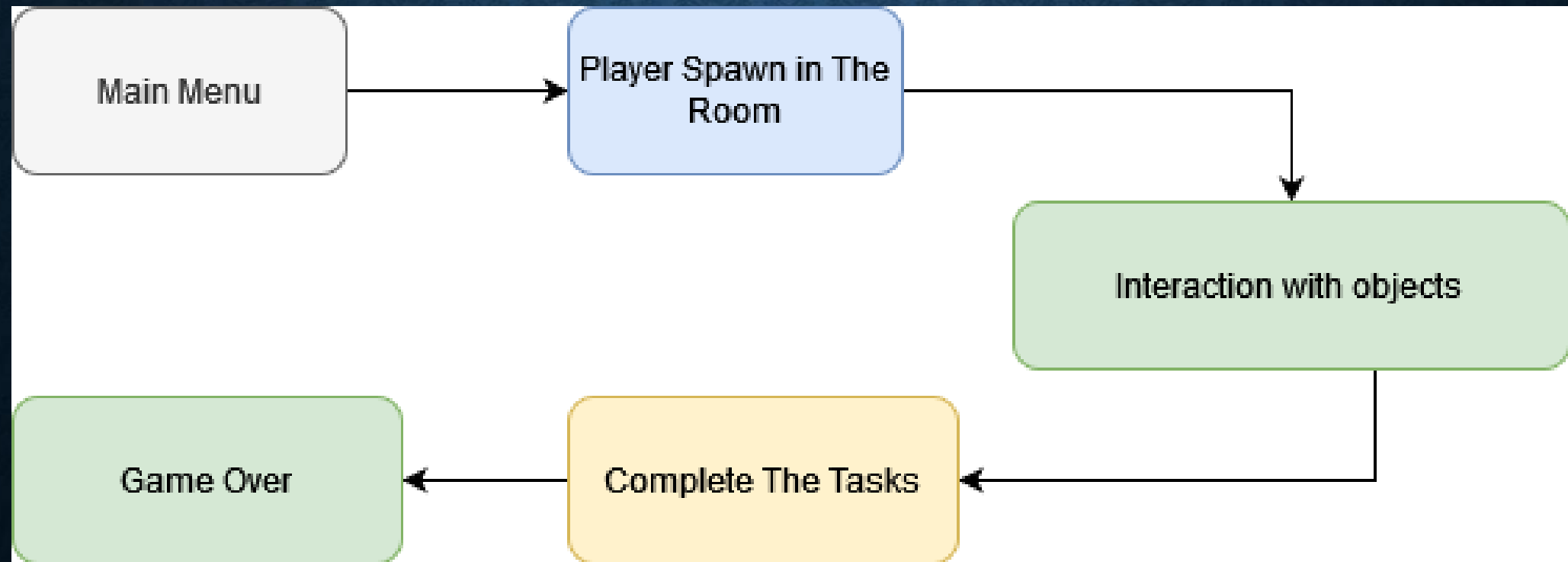
Collision Management

Managing Collision Layers

Object Grabbing

Player Movement by holding
objects in hand

FLOW OF GAMEPLAY



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...?





THANK YOU