VAR Project 3 – VR

# Requirements:

The application should have:

• A small virtual environment with several objects.

• Navigation: You can use the reticle pointer provided by GVR or the accelerometer input

to move the camera through the virtual environment (constant movement,

teleportation, …).

• Selection: let the user select objects in the environment to perform actions with them

(Rotate, translate and/or scale objects in the environment)

• Control: implement control mechanisms to change different aspects of your application.

For example: the color of a model, loading a model, changing between interaction

methods, change the application state, …

# TODOS:

* Disable Pull on Gallery/Master Interactables
* Disable Hand LineRenderer while holding spraycan
* ADD JustGrabbed Flag

Framework: SteamVR 2.5 for Handling the HMD and Controller Poses, no Prefabs from SteamVR

# Interaction System

Implemented:

* Locomotion: Realwalk, Continuous directional (Touchpad), Teleporting, Snapturning
* Interaction: Pick up Objects labeled “Interactable” in Touch distance, drop/throw them with velocity (RigidBodies)
* Raycast with visible Pointer and Endpoint
* Colliding with Scene objects
* Option to Freeze Objects in space when dropping
* Interaction: Pick up objects from afar with “Laser Pointer”, Rotate grabbed Objects
* Option to Freeze Objects in space when dropping

Upcoming:

* Option to “weld” Objects to other Interactables
* Add “FadeOut/In” for Snap turning -> less immersion breaking
* Highlight Objects in GrabRange/RaycastTarget

Bugs:

* ~~Fix direction of Raycast/Laserpointer(not straight from handle, but directional to the “LightCircle”; nicer for the real movements)~~
* ~~Fix “PropFlight” (Being pushed into the Sky when picking up a box your standing on): Ignore collisions while picking up objects~~
* Fix adjusting Gravity and movement speed

Optional:

* “Climbing” Locomotion on scalable wall, would be nice to experiment

# Game Logic/Content

* Spraycan Interactable Object – Recolor other Interactables
* Spraycan Color Menu
* “Gallery” widget to grab new Interactables (Shapes, Spraycans) onto the scene
* Trashcan (Destroy Collider)

# 

# Keybindings:

