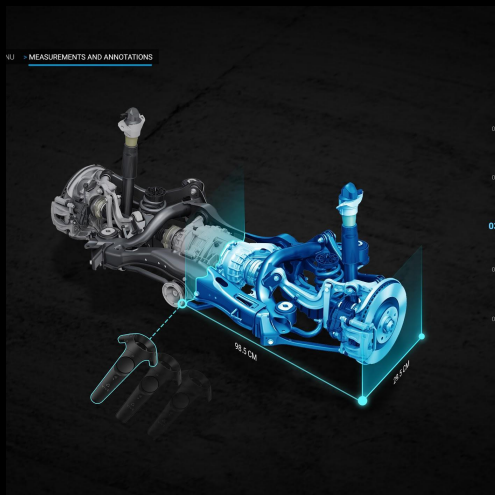


# Session 3

## Locomotion in VR

Have you ever experienced nausea in VR? If so, what caused it? How can we prevent users from feeling similar in our application

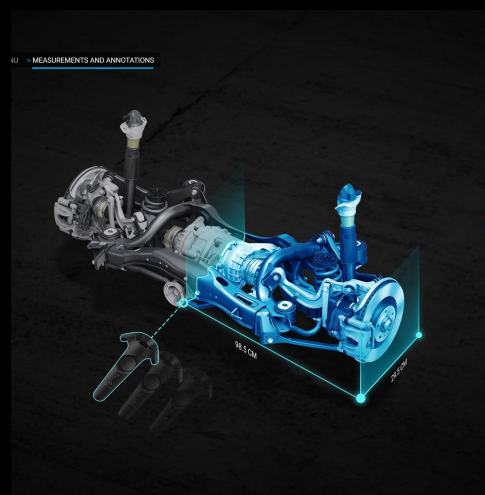
# Instructor(s)



**Instructor Name**

Instructor Title

Instructor Company

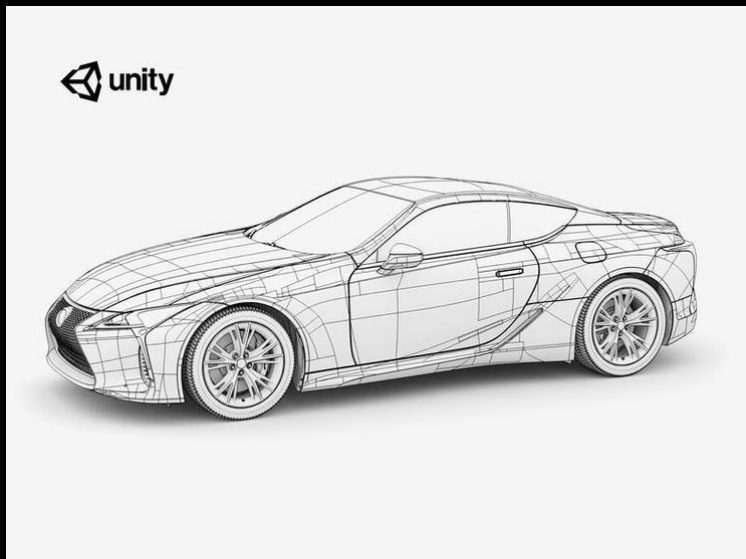


**TA Name**

TA Title

TA Company

# Session Goals



In this session, you'll:

- Explore methods of Locomotion in VR and the impact they have on user experience
- Configure controls for Teleportation using the XR Interaction Toolkit
- Create Teleportation Areas and Anchors for the XR Rig

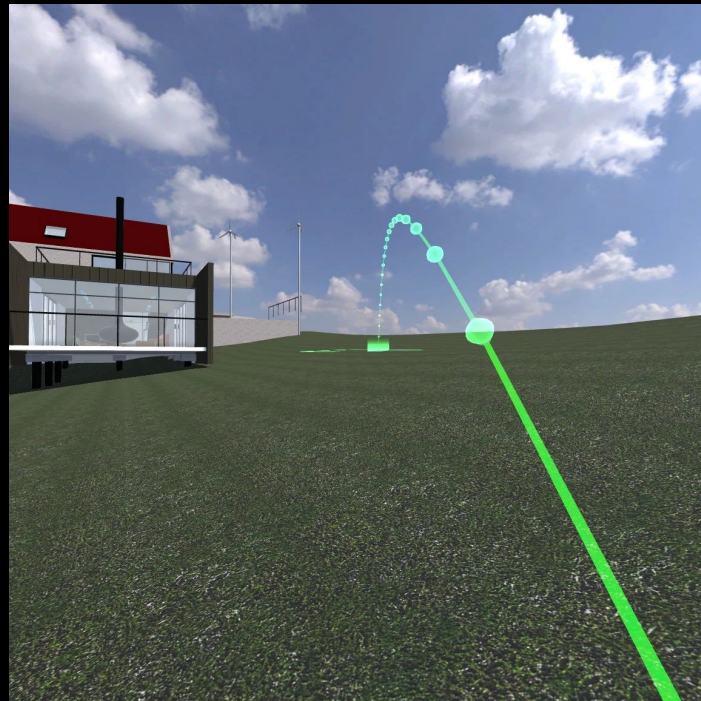
# Session outline

1. Types of Locomotion/Locomotion in XR Interaction Toolkit
  - Challenge: Add a Teleportation Area
1. Creating Teleportation Controllers in XR Interaction Toolkit
  - Challenge: Configure Teleportation Controllers in XRRig with Layer Masks
1. Controller Configuration/Snap Turning
  - Challenge: Configure Controllers and Snap Turns
1. Teleportation Anchors
  - Challenge: Add/Configure Teleportation Anchors

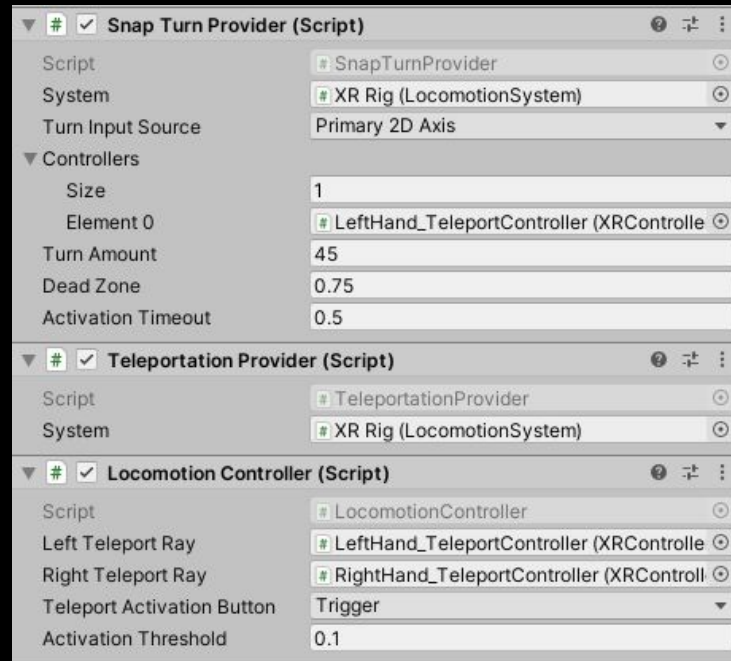
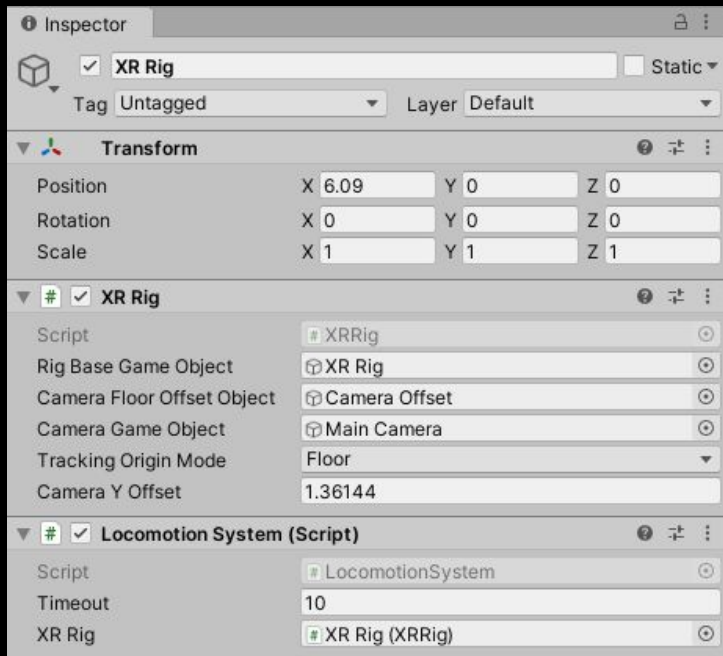
Activity 3: Add Teleportation Areas and Anchors to facilitate movement in a VR Project

# Types of Locomotion in VR

- Room-scale locomotion
- Teleportation
- Snap turns
- Free Movement

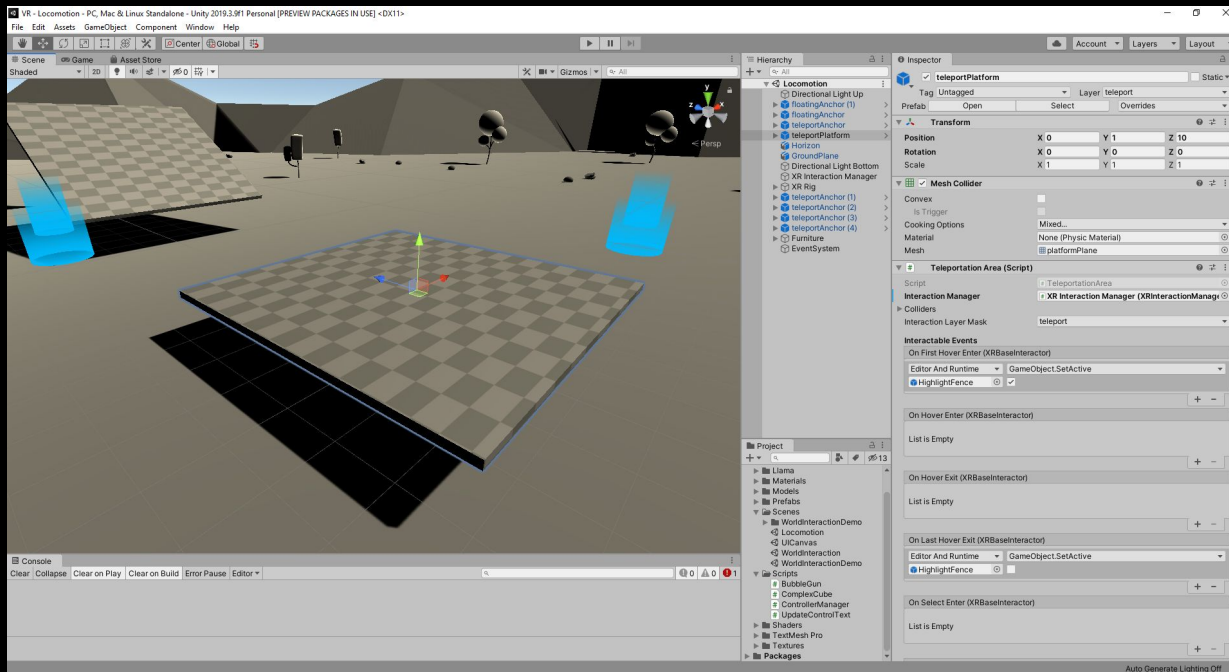


# Managing Locomotion with the XR Interaction Toolkit





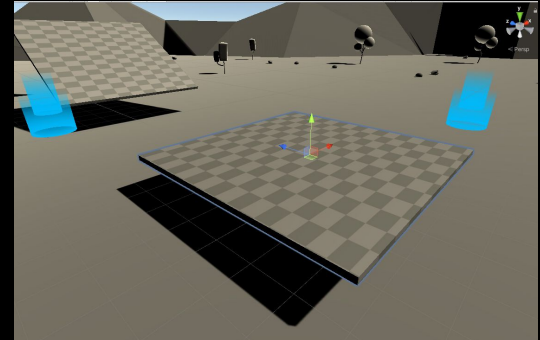
# Creating a Teleportation Area



# Add a Locomotion System and Teleport Area



1. Add a Locomotion System to your scene and connect it to your XR Rig.
2. Create and configure a Teleport Area on a Ground Plane in your Scene
3. Experiment with moving and teleporting through your scene and note any areas for improvement



Where in the scene can you move? Are there areas that are hard to reach/should not be traversable?

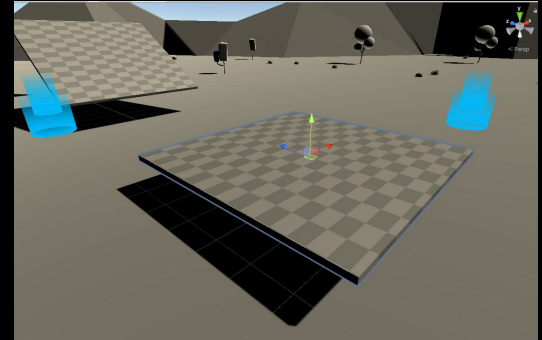
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# Add a Locomotion System and Teleport Area



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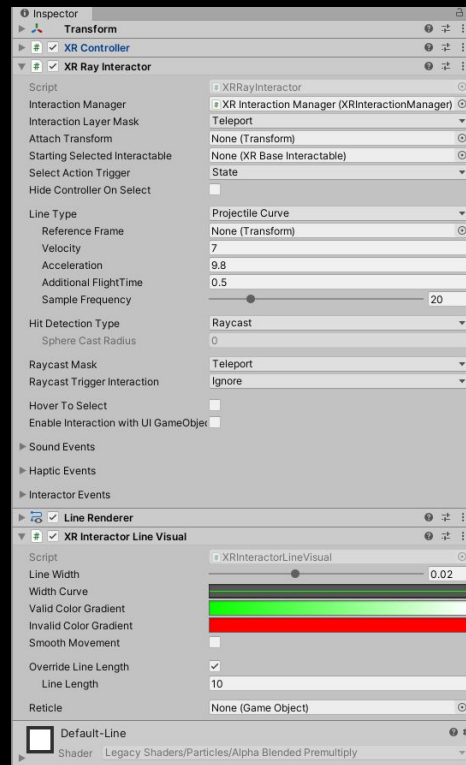
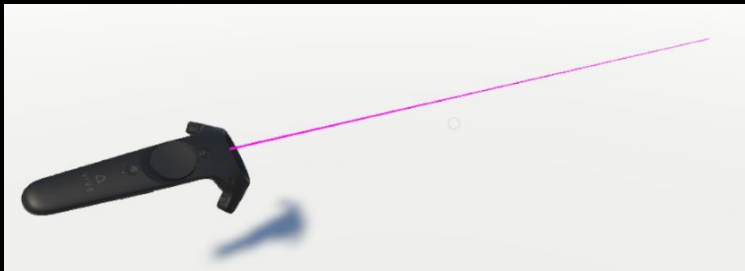
Where in the scene can you move? Are there areas that are hard to reach/should not be traversable?

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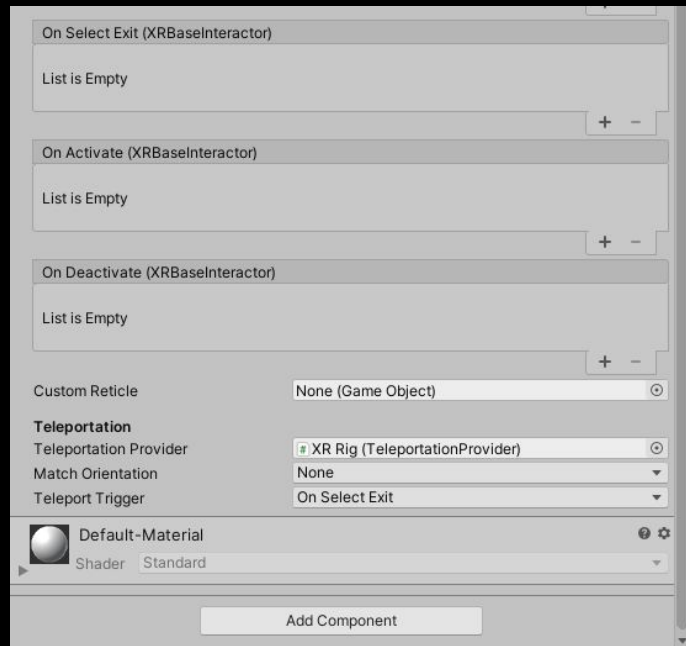
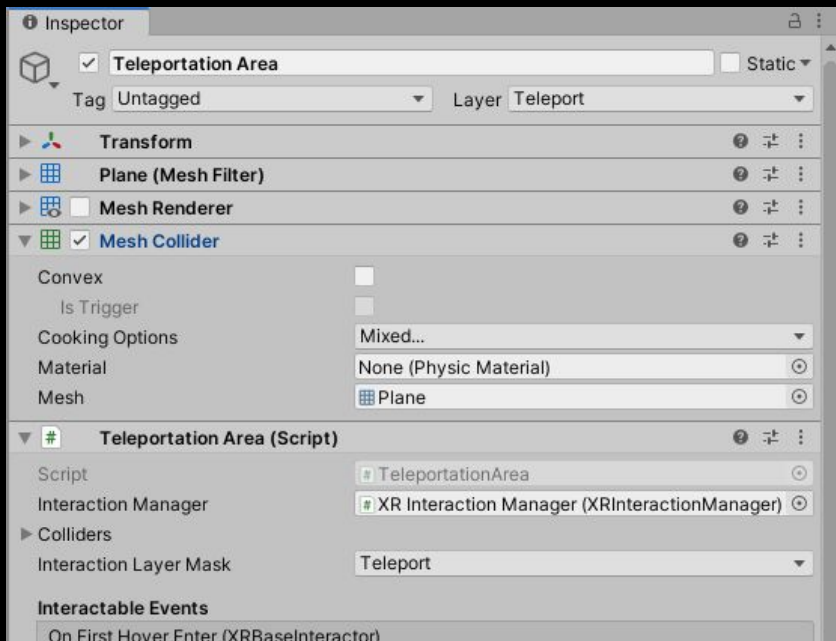
# Discussion

Share your ideas for ideal and comfortable teleportation/locomotion

# Creating Teleport Controllers



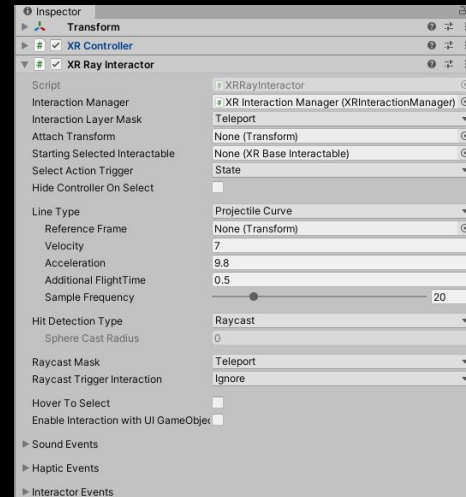
# Teleportation Area Parameters



# Create Teleport Controllers in the XR Rig



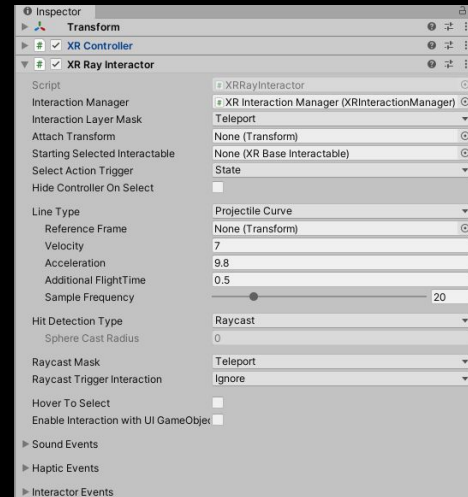
1. Locate the XR Controllers within your XRRig and duplicate them to create Teleport controllers
2. Configure the new controllers to use Ray Interactors
3. Assign the “teleportation” layer mask for the Teleport Area and the Teleport Controllers “Interaction Layer Mask” setting



# Create Teleport Controllers in the XR Rig

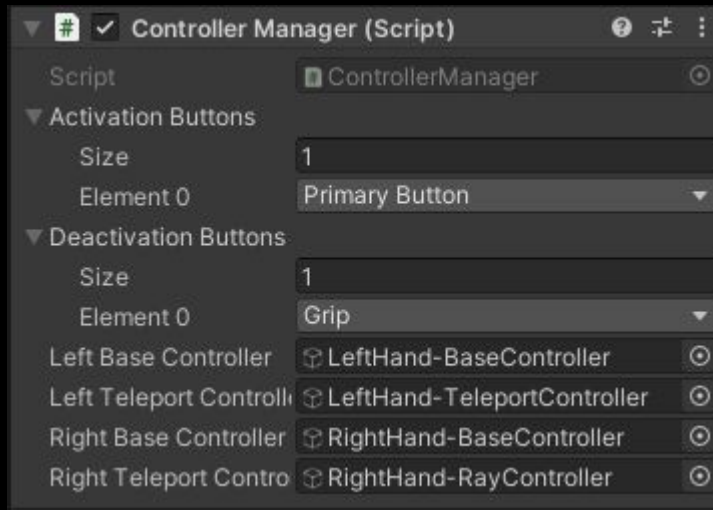


1. Locate the XR Controllers within your XRRig and duplicate them to create Teleport controllers
2. Configure the new controllers to use Ray Interactors
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# Using the Controller Manager Script



# Snap Turn Parameters

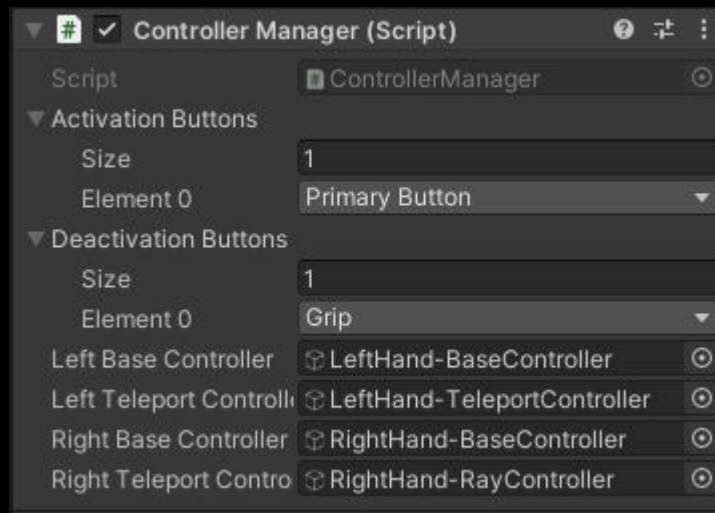
▼ # ✓ Snap Turn Provider (Script) ⓘ ⚙ ⋮

Script	SnapTurnProvider ⓘ
System	None (Locomotion System) ⓘ
Turn Input Source	Primary 2D Axis ▼
▼ Controllers	
Size	0
Turn Amount	45
Dead Zone	0.15
Activation Timeout	0.5

# Configure Controllers and Snap Turns



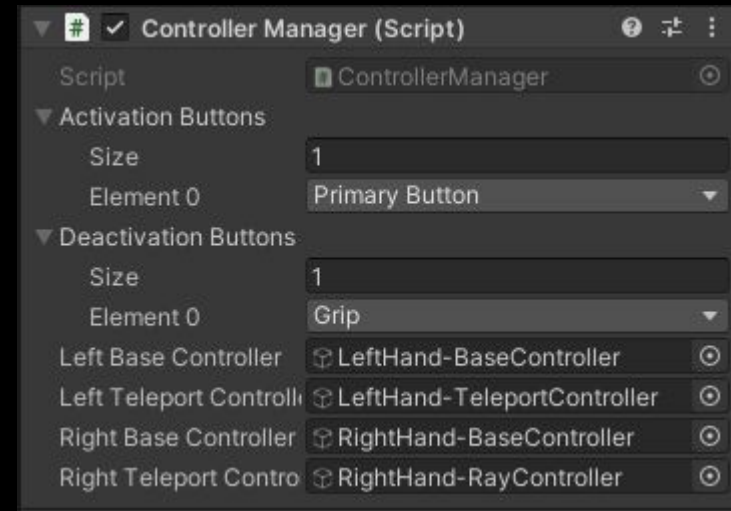
1. Add the Controller Manager script and attach the necessary controllers
  2. Toggle all controllers on and ensure they have the intended Interaction Layer Masks
  3. Experiment with the Snap Turn and Teleportation Area parameters to make a comfortable locomotion experience
- 



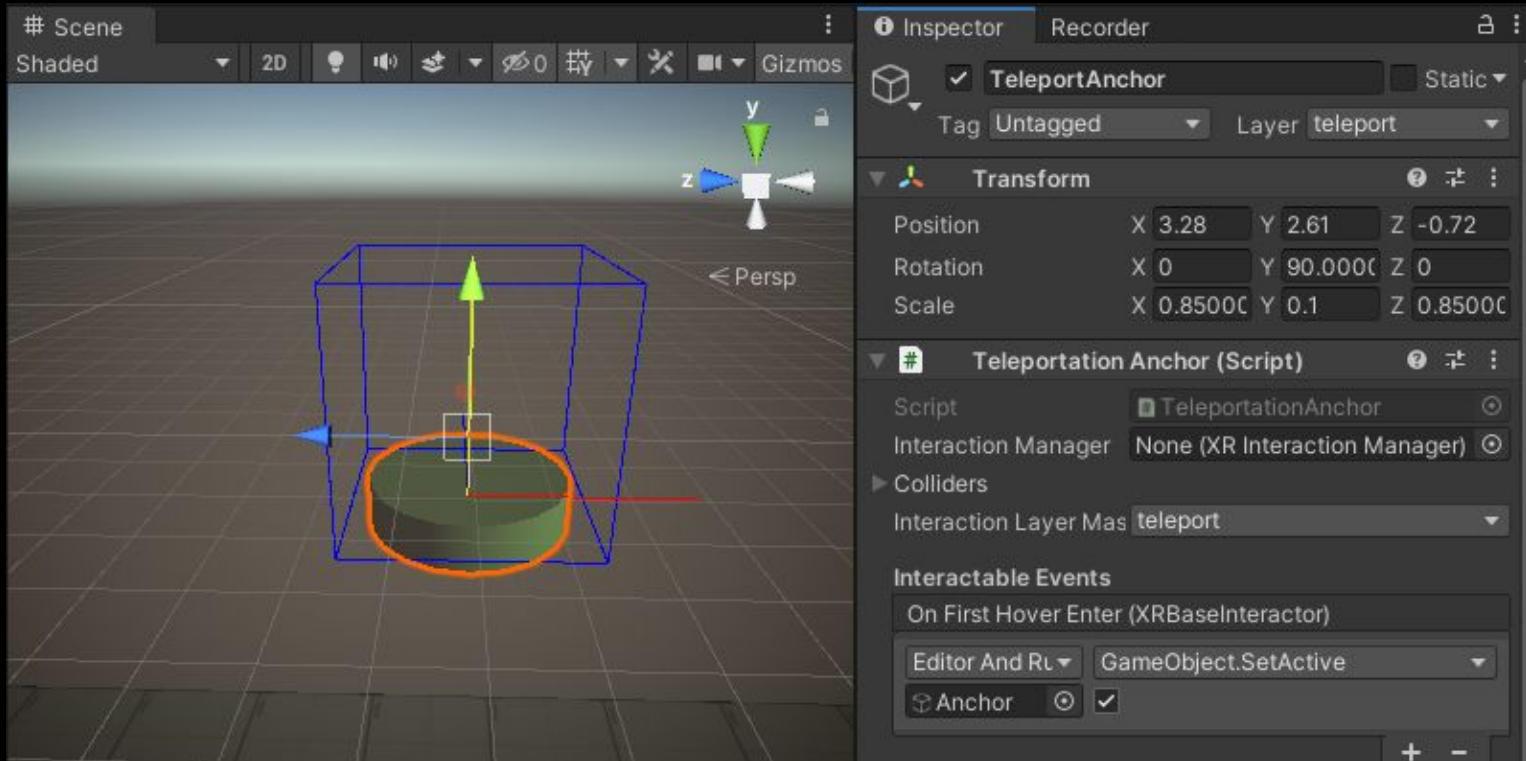
# Configure Controllers and Snap Turns



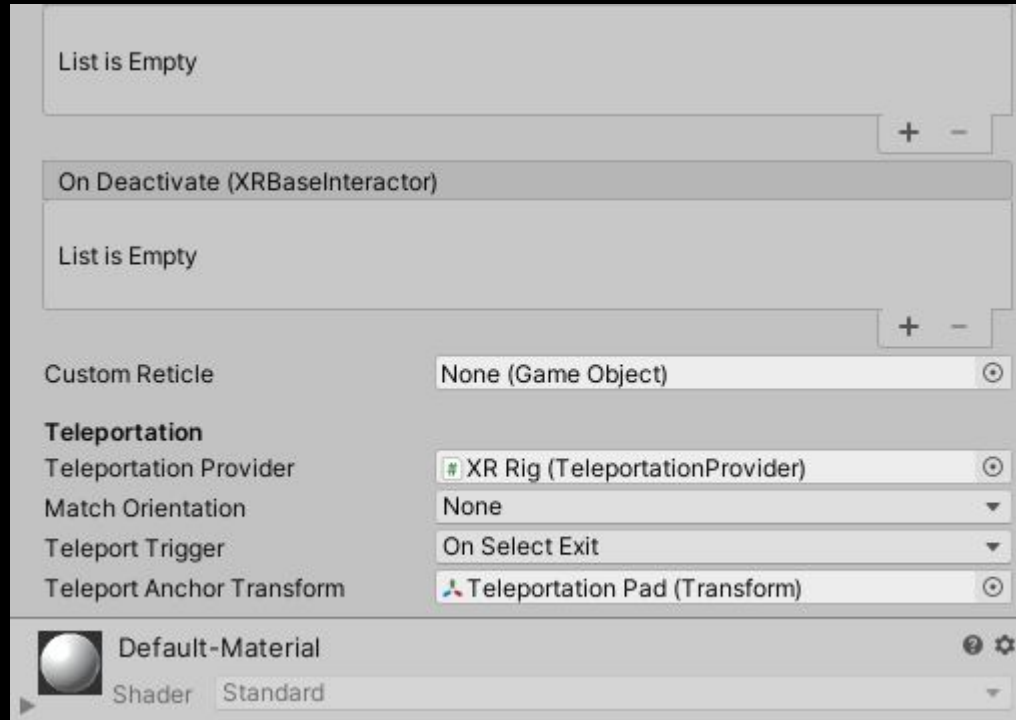
1. Add the Controller Manager script and attach the necessary controllers
  2. Toggle all controllers on and ensure they have the intended Interaction Layer Masks
  3. Experiment with the Snap Turn and Teleportation Area parameters to make a comfortable locomotion experience
- 



# Creating Teleportation Anchors



# Teleportation Anchor Parameters

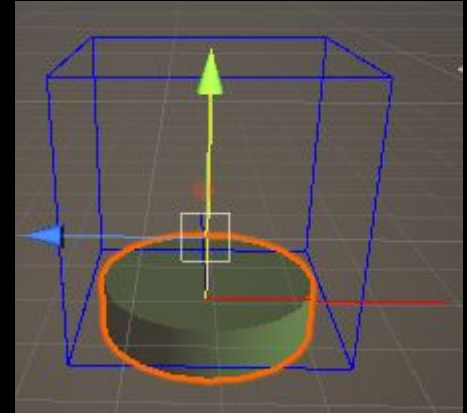




# Add a Teleportation Anchor



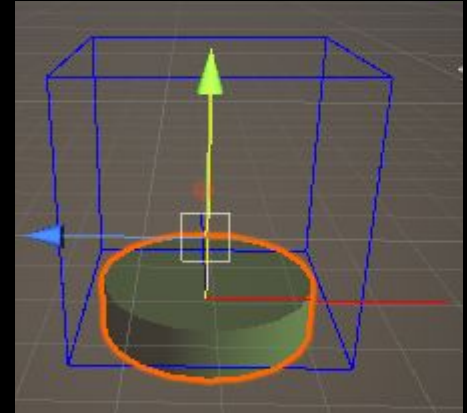
1. Create Teleportation Anchors around your scene and adjust their parameters
    - Why would you limit movement to specific points in an experience?
- 



# Add a Teleportation Anchor



1. Create Teleportation Anchors around your scene and adjust their parameters
    - Why would you limit movement to specific points in an experience?
- 



# Activity Session 3

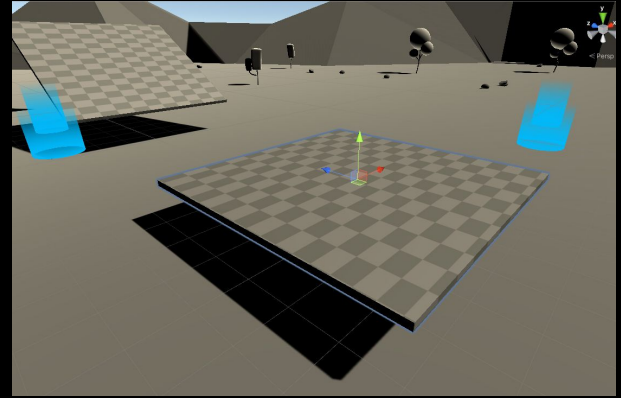
## Create Teleportation Areas and Anchors

# Activity 3 Goals

1. **Polish the Locomotion Interactions in your project with several anchors to highlight areas where users can interact with.**

**Challenge** - How can you show what direction users will be facing once they teleport to an anchor or on an area?

Feel free to ask questions!



# Thank you.