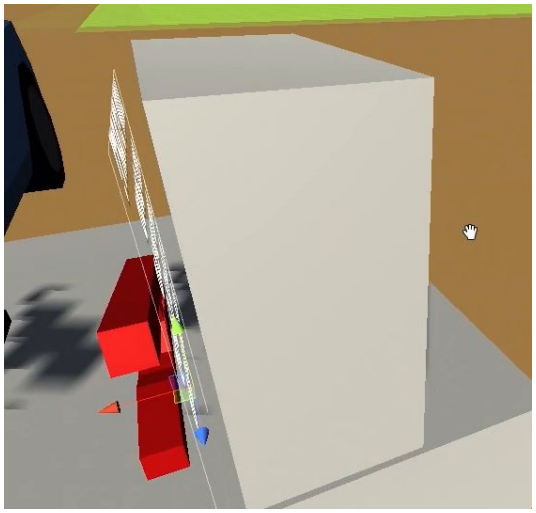
6.6 Precision Grab

The gap we fix:



Activities:

Step 1: Mind the Gap

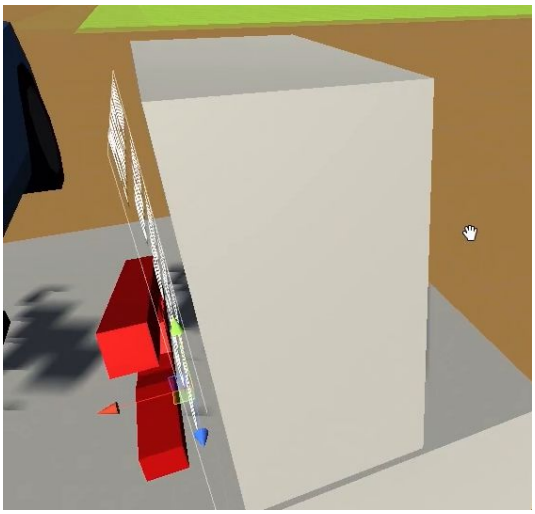
Step 2: Precision Grab

Length:	15 minutes
Overview:	To prevent the awkward snapping of an object to your hand, we use "Precision Grab". This can also be applied to the red and black clamps. We also adjust the text on the clipboard to remove a gap.
Project Outcome:	The clipboard is grabbed in a more natural feeling fashion as opposed to snapping into a fixed orientation on your hand.
Learning Objectives:	The students will be able to: - Modify the properties of the interactable object clipboard
Prerequisite:	Previous tutorials on User Interface
ISTE Student Standards	4c "Students develop, test and refine prototypes as part of a cyclical design process." 6d "Students publish or present content that customizes the message and medium for their intended audiences."
Video	https://vimeo.com/349074142

OR

Step 1: Mind the Gap

1. In the Hierarchy, select the Canvas inside the Clipboard. Adjust it's X position so it's closer to the cube. I used X: 0.51
    a. The gap we're removing:

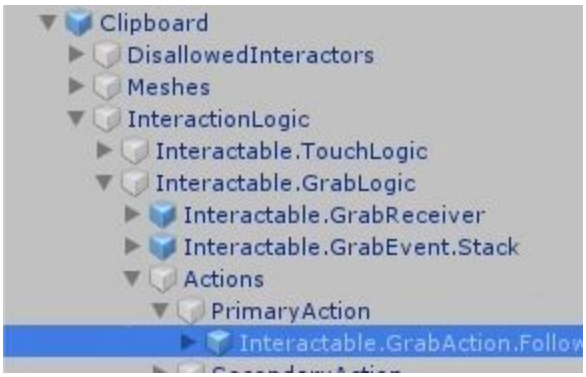


1. **Explain** The "Precision Point" is a Grab Offset setting (also called "Precision Grab") that makes picking up interactable objects not "jump" to your hand in an unnatural orientation.

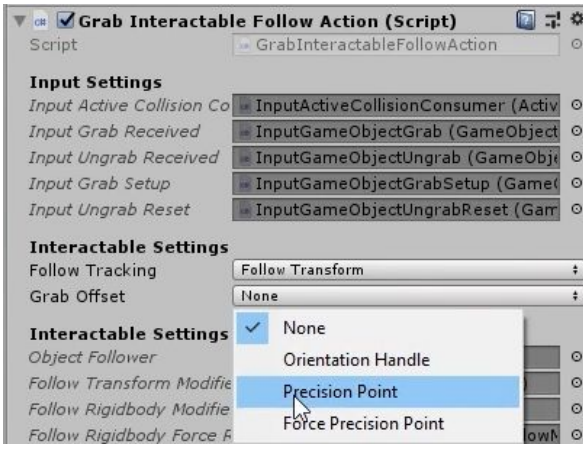
Step 2: Precision Grab

In play mode, currently, when I pick up the Clipboard, it "snaps" to an unexpected orientation on my hand. Let's change it to be more precise.

1. In the Hierarchy, expand the Clipboard > Interaction Logic > Interactable.GrabLogic > Actions > PrimaryAction > select the Interactable.GrabAction.FollowAction

b. 

2. In the Inspector, set the Grab Offset dropdown menu to "Precision Point".

a. 

Test out the difference between grabbing a clamp (it jumps to your hand's orientation) and the Clipboard (doesn't jump).

End of Lesson

Recap

Key concepts:

- Precision Grab makes a much more natural way to pick up objects like you would in real life, allowing you to pick up them up from any point of the object.

Key skills:

- Finding and modifying properties in the Inspector panel

Key terms:

- Grab Offset: The setting that determines how an object orients to your hand when picking up interactable objects.