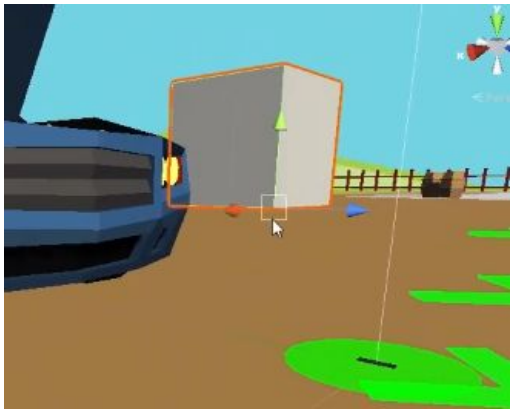
3.5 Resizing Objects for VR Realism



Activities:

Step 1: Test the scene

Step 2: Adjust to make it realistic

Length:	30 minutes
Overview:	Testing the scene to see if it is “human scale” and objects are reachable
Project Outcome:	Objects will be resized (smaller)
Learning Objectives:	The students will be able to: - Test the scene to observe scale - Adjust scale properties
Prerequisite:	Cars and Batteries are added to the scene
ISTE Student Standards	6d “customize the medium for the intended audiences”

Video https://vimeo.com/349058710

OR

Step 1: Test the scene

1. Play the scene
2. Notice how the large the car “feels” in front of you. It’s a bit large!

- **Explain** Play testing often ensures you make little changes at a time. NOT playtesting often can result in

lots of unforeseen problems...and can be overwhelming.

Step 2: Adjust to make it realistic

3. Play testing reveals that the cars are much to large. Select the Good Car in the Hierarchy and use the Inspector to change the scale of X, Y, and Z to 0.6, 0.6, 0.6
4. Similarly scale the Dead car to the same values.
5. Slide the cars closer together (near the yellow arrows.
6. Scale one cube by the same values, 0.6, 0.6, 0.6.
7. User "vertex snapping" to perfectly place the cube on the ground by holding the V key and grabbing the square icon at the bottom of the cube.
8. To save time, simply duplicate the newly resized cube and slide it into position by the dead car (deleting the old Dead Car cube).

- **Explain** A “vertex” is a corner point of an object (made of triangles).

- **Explain** Vertex Snapping (Hold the V key, then grab a vertex indicated by the square highlight) allows precise alignment

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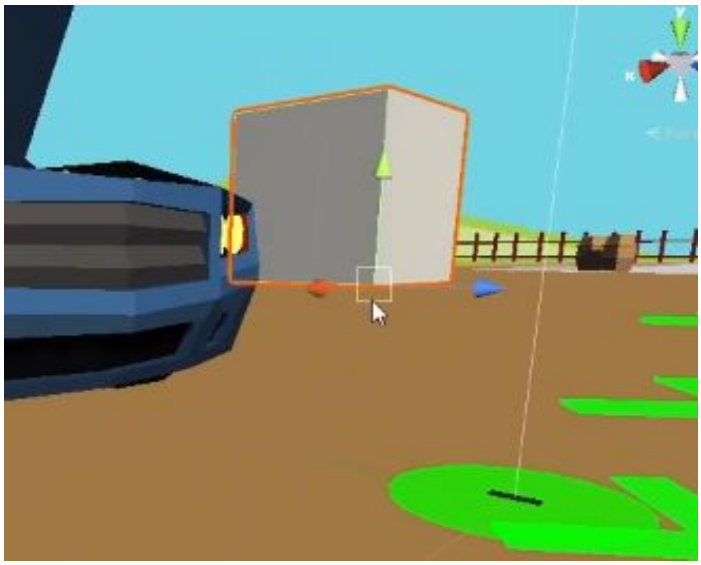

The square icon indicates you are about to grab a vertex for Vertex Snapping.

End of Lesson

Recap

Key concepts:

- Testing to ensure a human can reach the required objects

Key skills:

- Moving objects using either the Transform > Position properties OR moving with the Red, Green, and Blue objects
- Moving objects using vertex snapping (Hold the V key, grab the square icon)

Key terms:

- **Vertex Snapping:** A method of aligning edges quickly