

Week 2, Video 2: Gizmos and Objects

A Truly Unreal Curriculum

Overview

Lecture: **Week02_Video02_Gizmos&Objects**

The objective of this lecture is to cover the three basic transformations that can be applied to objects: rotation, scaling, and movement.

Outcome

Students will learn how to place and transform basic objects in Unreal Engine.

Orbiting in Viewport

- Hold down the right mouse button and use WASD to move around

Resetting Layout

- Go to the toolbar located above the Place Actors Panel in the upper left-hand corner
- Select Window → Load Layout → Default Editor Layout
- This will reset your game layout to the default one if you ever need to start over

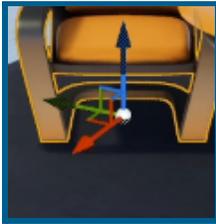
Placing Objects

- Go to the Place Actors panel located beside the viewport and press the Basic tab. Click and drag an object into the viewport and drop it in your desired position.



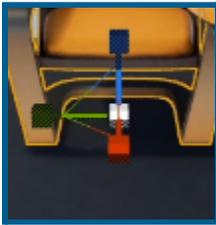
Gizmos

- There are three different gizmos or tools that you can use to manipulate your object
- All gizmos share the same axes: **X direction (Red Arrow)**, **Y direction (Green Arrow)**, and **Z direction (Blue Arrow)**



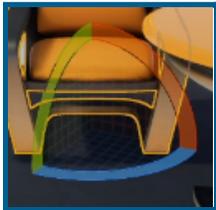
Move Tool

Can be accessed by selecting the object and pressing W. Clicking on one of the arrows and dragging will move the object in that direction.



Scale Tool

Can be accessed by selecting the object and pressing R. Click on one of the handles and drag out to scale the actor up or drag in to scale the actor down, in the handle's direction.



Rotate Tool

Can be accessed by selecting the object and pressing R. Click on one of the axes and drag the object in the axis' direction to rotate the object.



Using Details Panel

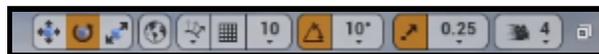
- The Details Panel can also be used to manipulate your objects in a more calculated way
- After selecting an object, go to the Transform section which is located right at the top of the Details Panel



- Here you can input different values for moving, scaling, and rotating your object across specific axes (X, Y, Z direction)

Using Viewport Toolbar

- The Viewport Toolbar can also be used to manipulate your objects and switch between the different tools
- It is located at the upper right-hand corner of the viewport:



- You can switch between the three gizmos on the left of the toolbar
- The toolbar can also be used to change the increments of the different gizmos for exact manipulation
- This can be done by hovering over the number beside the gizmo you want to change the increment for. This will open a menu where you can change the snapping increments
- Snapping can also be disabled altogether for smooth object placement by pressing the grid icon on this panel

