Usage Instructions

Using the runtime gizmos

This asset package contains a series of four 3D manipulation gizmos allowing developers to provide translation, scaling, rotation, and view snapping to their end users in a final-build Unity project. To ensure that these gizmos can be interacted with and render correctly, a few instructions must be followed; these are listed below.

- A new layer should be created specifically for the use of these gizmos; in conjunction with a secondary orthographic camera, this "Gizmo Layer" can be used to render the gizmos on top of any target game objects regardless of their position in 3D space.

- Once a prefab gizmo has been added to the scene (and set to the Gizmo Layer), its pre-attached script (or the scripts attached to each of the handles within the prefab object) may contain variables that need to be populated. These are commonly the camera that it set to render the aforementioned Gizmo Layer and the target game object to be rotated, scaled, translated etc.

- If required, the View Gizmo can be added to a UI canvas (also set to the Gizmo Layer) to ensure it remains in a set position and can be seen by the user at all times.

Different materials can be used to alter the appearance of any gizmo by applying the material to each gizmo handle, or its correspinding script if a new highlight material is desired.

Additionally, the functionality of each gizmo in contained in separate C# scripts within the Assets/Scripts folder. If changes in the behaviour of any gizmo are required, each script is fully commented and can be edited at will.

Any issues encountered, questions, or suggestions should be posted on the Asset Store page of this package, or on the GitHub issues page on the repository at github.com/CaptainHillman/UnityGizmos/issues.

Example: Adding the Scale Gizmo to your Scene

This example details how to add the Scaling Gizmo to a blank scene generated from a new Unity project, but should be applicable for existing scenes in existing projects.

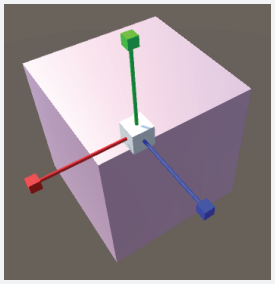
1. First, import the Runtime Gizmos package along with its scripts, materials, meshes, and examples.

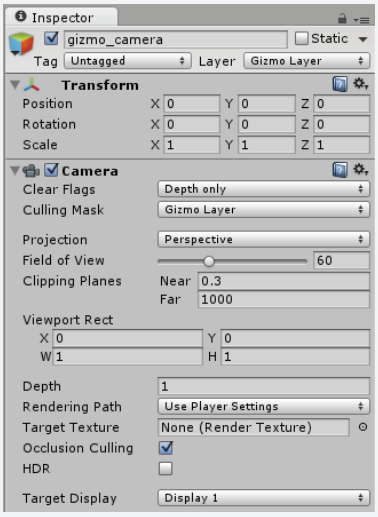
2. Next, a Gizmo Layer must be created to contain all the gizmos.

3. An orthographic camera should be created and set to render only the Gizmo Layer (the main camera should also be set to exclude the Gizmo Layer). To ensure it renders gizmos on top of any target objects, ensure its depth is greater than the main camera and its clear flags are depth only. Personally I like to nest this gizmo camera as a child of the main camera object to ensure they're rendering the same viewpoint.

4. Any missing variables in the scripts attached to the gizmo object (or its sub objects) should be populated as needed. These are generally the Gizmo Layer camera, and the target of the scaling action.

5. The scene should now be able to run, allowing the user to click and drag the scaling gizmo to scale the target object along any axis or uniformly from its center.





Happy Development!
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