

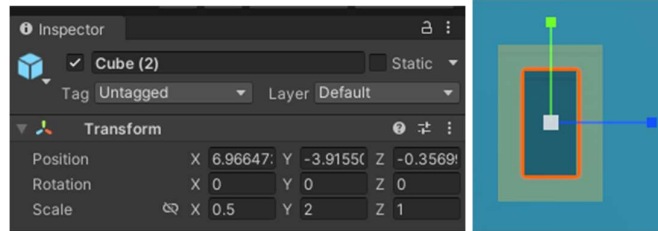
# CM3045 3D Graphics & Animation

Mid-Terms Coursework Exercise 1

My First 3D Scene

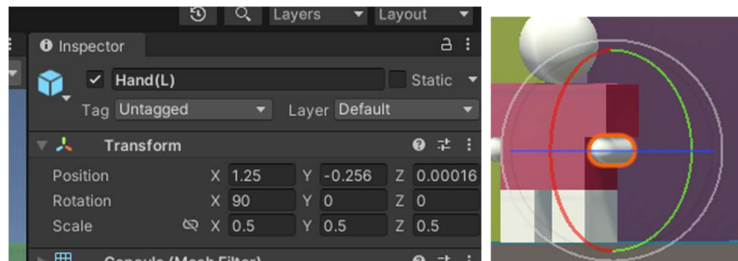
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Transform is a general term for the techniques I have used for my project. I scaled the game objects to the different sizes I desired.



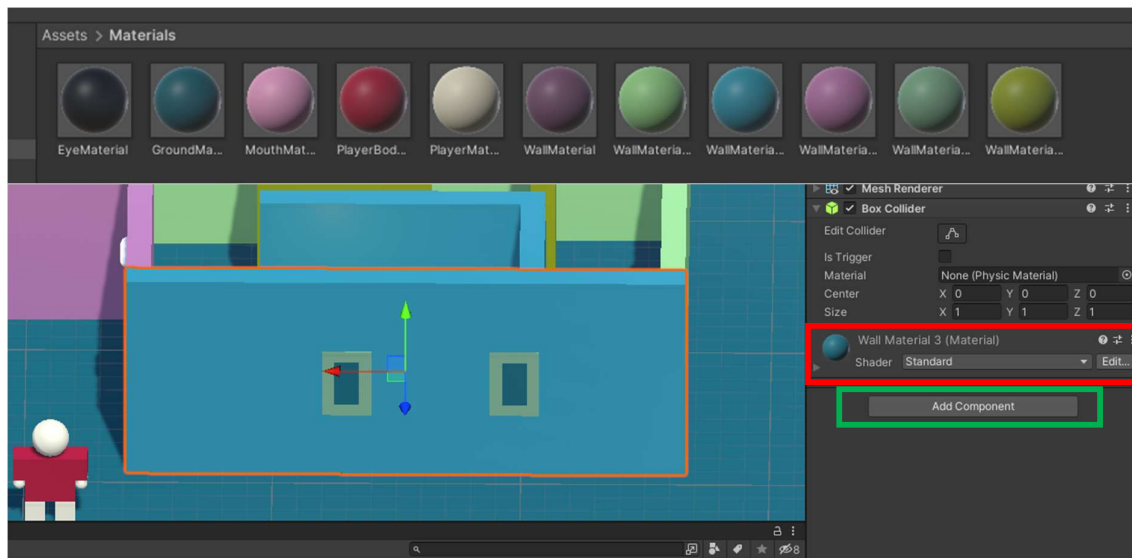
Above is an example of me scaling a cube, to fit it such that it looks like a window. Scaling of the game object can be done by clicking 'R' and manually pulling the axis, this can be very useful, however I personally prefer to manually keying the values of my desired value into the inspector column to be more precise.

Rotate is another form of transformation which allows me to rotate the game object to any direction I desire.



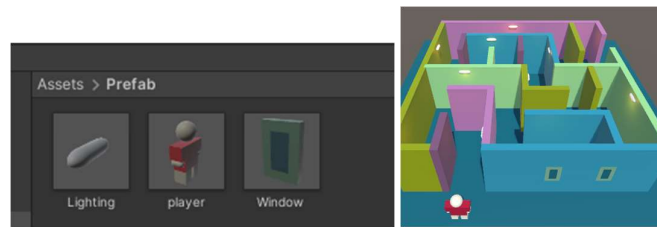
Above is an example of me scaling the game object, which is the hand of my Player. I rotated it by 90°. This can be done by clicking 'E' and dragging along the 3 axis, however, I personally still prefer to key in my desired value into the inspector column for accuracy and precision.

Materials can be created and added to the different game objects. The material class exposes all the material's properties allowing to changes to be made.



Above are the materials created and used. By dragging and dropping the materials onto the game object will allow the material properties dragged to be applied on the game object. I prefer to drag and drop them to my game object instead of manually adding them as a component in the inspector column (Green Box). When material component is added to the game object, it will appear on the inspector column (Red Box).

Prefabs are also created in my project. Prefabs are a type of component which is special, it allows the fully configured game objects to be saved in my project such that I am able to reuse it. The assets of prefabs can be shared between different scenes and even projects. I created prefabs for my player, lighting, and window.



As shown above, I have multiple lightings, creating prefabs eases my workload, such that I do not have to manually create many lightings. I am also able to share the assets (properties) among all my lightings. With the help of prefabs, I can duplicate as many lighting as I desire to put in my project. Press "1", "2", "3", "4" for the change of lighting colours.

Project Link: <https://hub.labs.coursera.org:443/connect/sharedqymnqwue?forceRefresh=false>