Assignment 5
**Unity Interaction**

This assignment consists of creating a simple scene in Unity as well as practicing scripting and interaction modules like those that we covered in class.

1. Please use the Unity editor to create a new project and a new scene.

2. Import (or create) 3D objects to the scene, and adjust their properties in the editor's "inspector" panel.

3. You will also need to add 3 different sound effects to your scene.

In order to implement those task, you will need to create a room with 3 doors (use imported objects or scale 3D cube to turn it into a door-like rectangle, set materials and adjust a camera in your scene to see all three objects. Use Maya to model your obejcts. Use Boolean operations to cut door holes inside your room model. Use "reverse normals" function in Maya to inverse normals to see the inside of the room. Now add the floor (plane) and a first person character controller to walk inside the room. You may incorporate other assets (furniture elements, textures, lights, etc.) into your scene by importing them into/creating them inside your Unity project to make it more interesting and engaging.

As the character walks from door to door inside the room, and touches the doors (collision), each door should start to rotate (along the Y axis) and a new sound FX plays. As the user presses 3 different mouse buttons, the colors of 3 doors should change into different colors.
Add a "stop" action to stop all doors from rotation if the user presses Escape key.
Use a Key Code reference page here to find out the Key Codes:
https://docs.unity3d.com/ScriptReference/KeyCode.html

Please use the variables and collision functions we have covered in class. Combine the various modules we covered to create an interactive scene. Use your problem solving skills to creatively combine different functions and find workable solutions. Use a meaningful project organizational structure. (Folders/subfolders)

You your imagination to create an impressive thematic interior for your room!

Your project will be evaluated according using two criteria: creativity (graphics/design/aesthetics/contept) and functionality (please see the tech. requirements below).

Your result should be a .zipped project file of your entire project with all the assets being included. Submit it in the DropBox class folder.

**Technical requirements:**

-Project has good organizational structure
-Scene contains all geometry: camera, 3 doors, floor, room, etc.
-Scene includes at least one object imported from another source (e.g., made in Maya, downloaded online, etc. )
-Scene incorporates at least 4 different scripts
-Vars, functions, materials, key and mouse interaction inputs
-Error-free compillation and smooth interaction