

Skyboxes, Sound, iTween, and basic trigger scripting.



What we're up to.

1. I do, you watch.

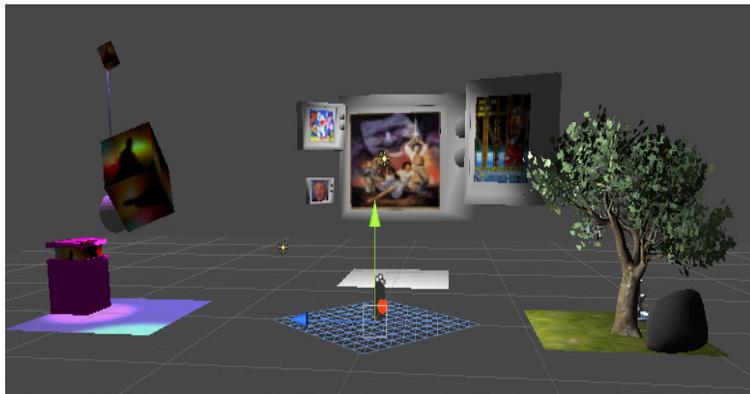
2. I do, you help.

3. You do, I help.

4. You do, I watch.

FIRST: SKYBOXES!

- Are actually a cube that you are viewing from the inside. Can provide atmosphere.
- You can change them under Edit → Render Settings → Skybox Material.



SECOND: SOUND!

- Sound in Unity is handled through components known as Audio Listeners (Ears) and Audio Sources (Tape Players).



WAIT, WHAT'S A COMPONENT?

1. In Unity, often, you will want objects to act a certain way. So you can use components (which Unity has ready for you!) to cause them to do ANYTHING.
2. For example, the Rigidbody component (Component → Physics → Rigidbody) will cause the object to react to physics.

HOW TO PUT MUSIC IN YOUR SCENE:

STEP ONE: Make sure you have ONE Audio Listener (check the inspector once you have clicked on your “main camera”...main cameras automatically have audio listeners. If you don’t have one, look under Component → Audio → Audio Listener.

STEP TWO: Place an audio source, from the same part of the components menu, onto the thing you want to emit the sound.

STEP THREE: Import your music file and assign it. Then fidget with how far you want the sound to be heard. Click the “Play on Awake” check box.

THIRD: HOW TO TRIGGER A SOUND!

STEP ONE:

This requires that we create CUSTOM components for our objects, or scripts. To create a script, you can click “Create” in the project window. I will be using Javascript.

STEP TWO: Name it something helpful.

STEP THREE: Create a cube to use as your “Trigger”.

STEP FOUR: Drag your script onto your “Trigger” cube with the left mouse button.

STEP FIVE: Now, if we click on the object, we can see our script added. On the object, you’ll want to make sure that it has some kind of “Collider” component. If it doesn’t, add one via the Component → Physics → Box Collider.

STEP SIX: Click the “Is Trigger” box. This will have TWO effects. **First**, the box to allow things to pass through it (a cube with a rigidbody and “isTrigger” checked will _____?). **Second**, when a First/Third Person Controller or an object with a rigidbody component touches it, then it will look in the scripts attached to it for a certain “function” called “OnTriggerEnter”.

STEP SEVEN: Add an “Audio Source” to our “Trigger Cube” so it can play our sound. STEP EIGHT: Turn off the “Mesh Renderer” if you don’t want to see your trigger!”

STEP NINE: Our script should look like the following slide. Done!

THIS SHOULD BE IN YOUR SCRIPT:

```
var mySound : AudioClip;
```

```
function OnTriggerEnter (thingThatCollided: Collider)  
{  
    print("Playing your sound!");  
    audio.clip = mySound;  
    audio.Play();  
}
```

Using triggers for other purposes.

- We have been programming using OBJECT ORIENTED PROGRAMMING.
- Scripts can talk to other scripts—you can tell a cube to rotate, for example, but only when you step on a trigger.
- DEMO LESSON!

BONUS! iTween

iTween is an interpolator. It manages different kinds of movement for you so that you don't have to do all kinds of complicated easing math.

Download it, put it in your project in a folder in the root directory called "Plugins". This folder is not created automatically.

Call it with commands like "iTween.MoveTo...". There are many commands. You can see them all on the website!

DEMO LESSON!