

Animator

Objective

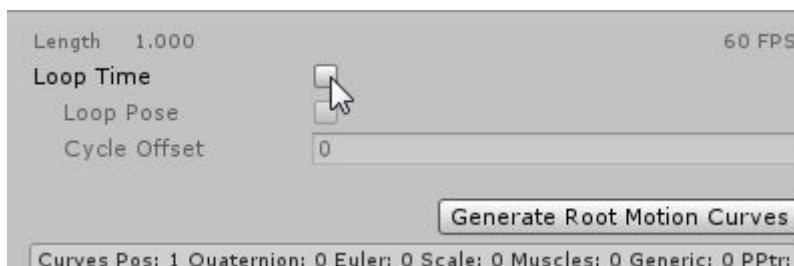
Use the Unity Animator with code to control animations easier.

Make A Door

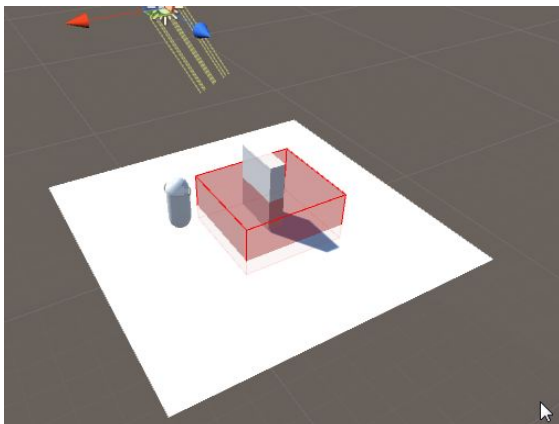
Create a door that opens and closed with Animations using the Animator Window, Triggers and Code.

Setup

- Import the basic FPS controller
 - Place the prefab in the scene
 - Tag the player as “**Player**”
 - Delete the existing camera
- Import the **TriggerDisplay** script that you created in the triggers exercise
 - Create a trigger that surrounds the door
- Create a scene with a Cube door
 - Use the animation window to create a simple animation that makes the door open (slide open, or up, or swing Open)
 - Ensure the animation does not loop (clicking on the animation in the Project panel)

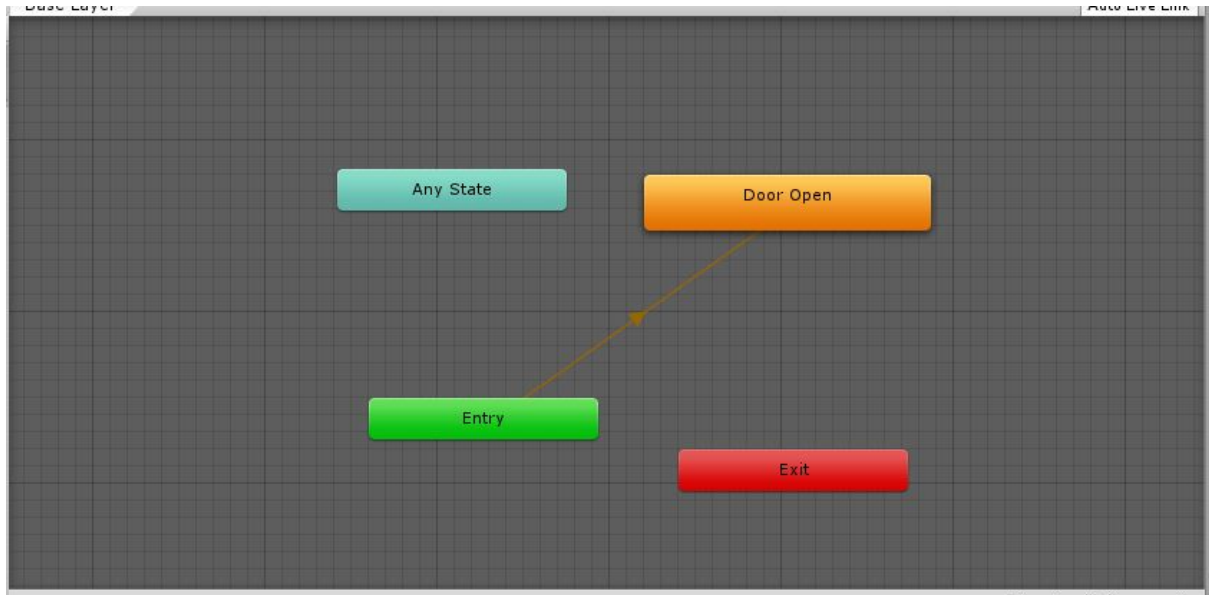


It should look something like this

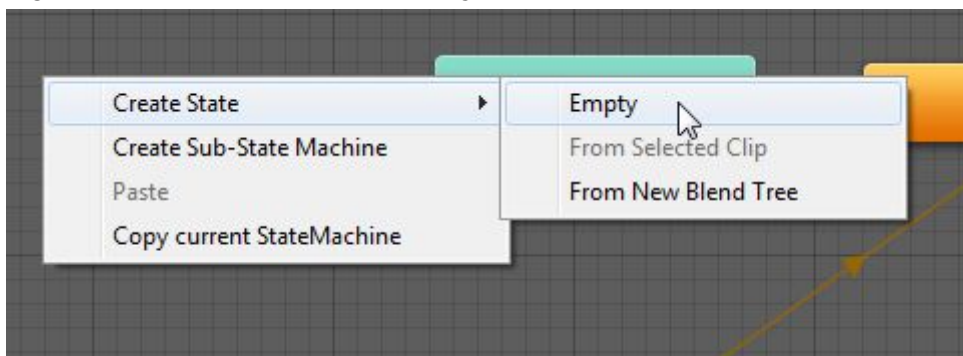


Lesson

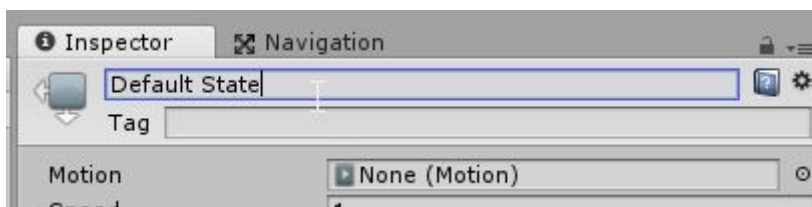
Open up the animator window and with the door selected you should see the animation.



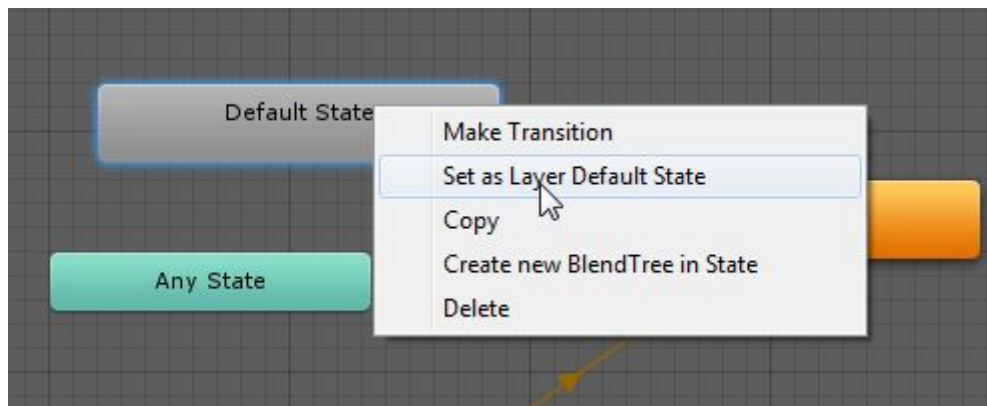
Right click to **Create state -> Empty**



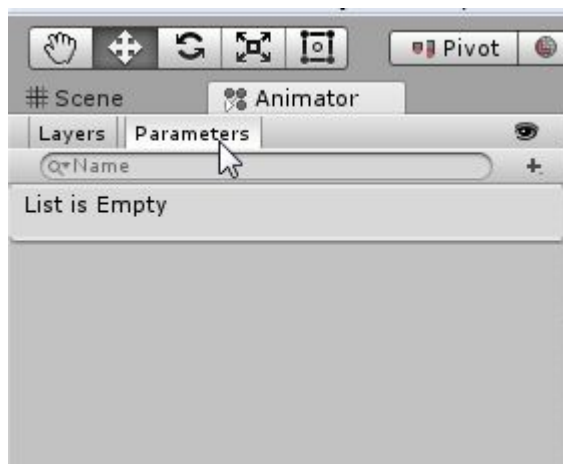
Rename this "Default"



Right click on this new state and select "Set Layer as Default State"



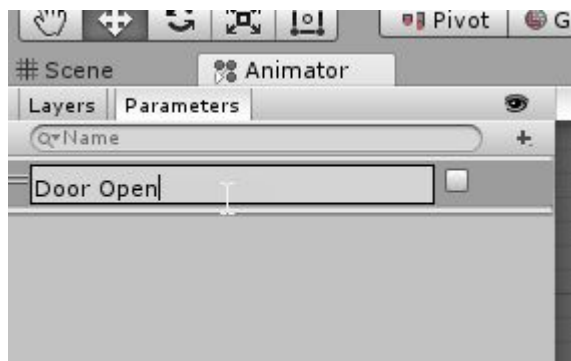
Click on the Parameters tab



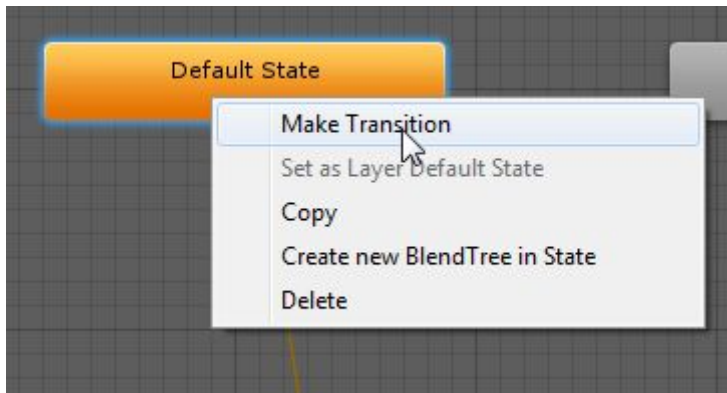
And create a new Bool parameter



called "Door Open"

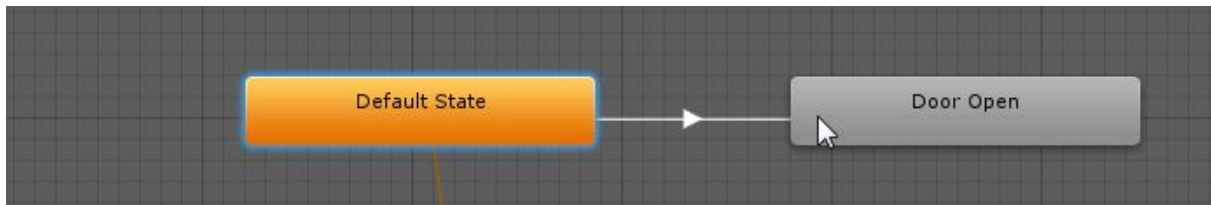


Right click default and select '**Make Transition**'



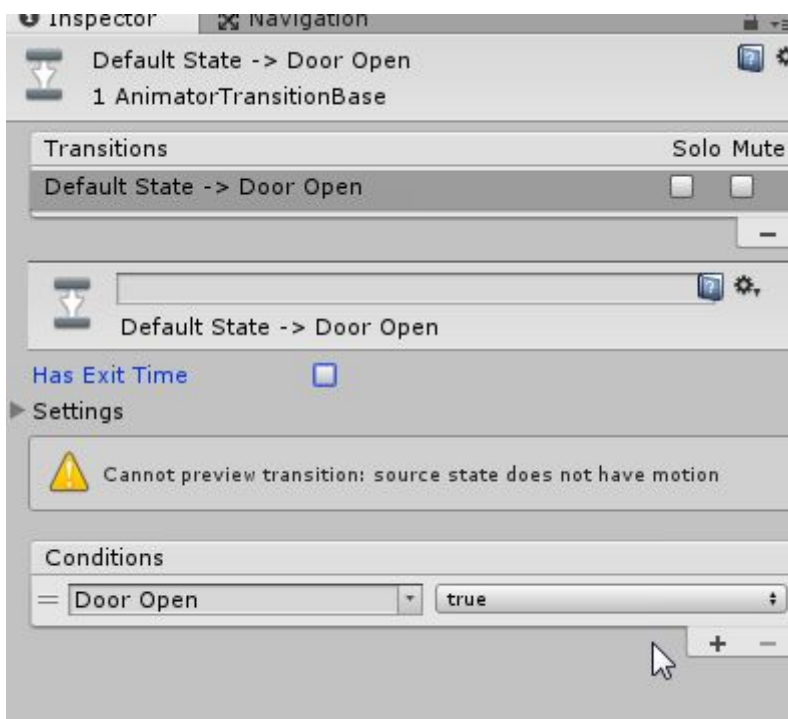
from Default to the Door Open animation;

If you now click on the '**Door Open**' state you will make a transition to it



Click on your new transition arrow and in the Inspector add a Condition "**Door Open**" and **True**

Untick "**Has Exit Time**"



Make a script called **DoorTrigger** and place it on the trigger in the game

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class DoorTrigger : MonoBehaviour
{
    public Animator doorAnimator;

    //When something enters the Trigger
    void OnTriggerEnter(Collider other)
    {
        if (other.tag == "Player")
        {
            Debug.Log("Door Open");
            doorAnimator.SetBool("Door Open", true);
        }
    }
}

```

Don't forget to assign the door in the inspector

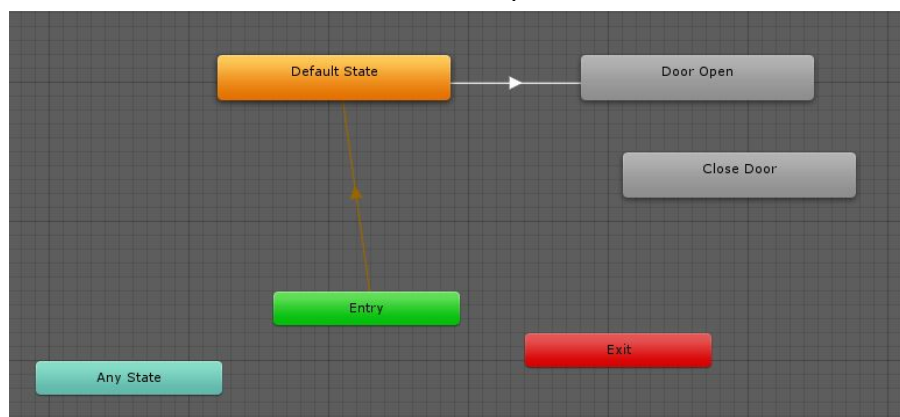


Now if you press play and walk into the trigger then the door will open.

Let's Make the Door Close

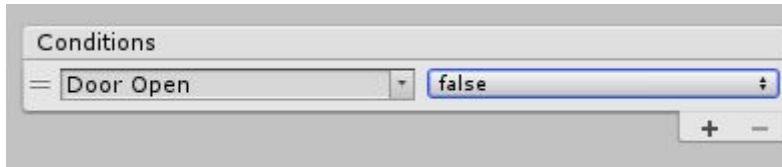
In the Animator window, Duplicate the Open Door Animation (Ctrl+d)

Rename it to "Close Door" and set its speed to -1

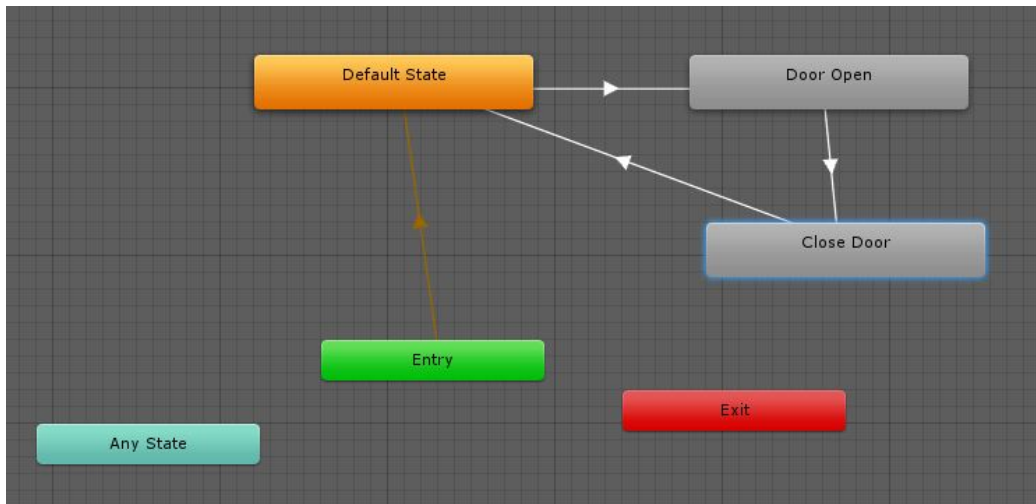


Create a transition from "Open Door" to "Close Door"

Make the Condition “Door Open” and False



Then create a transition from “Door Close” to “Default”



Update the **DoorTriggerScript** and add this function

```
void OnTriggerExit(Collider other)
{
    if (other.tag == "Player")
    {
        Debug.Log("Door Close");
        doorAnimator.SetBool("Door Open", false);
    }
}
```

Results

When the player walks into the trigger the door will open, when they exit the door will close. Magic!