when2meet.com/?15165911-zhI2r

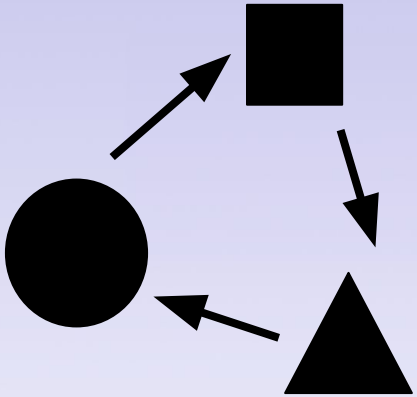
+ Bring up your snowpeople!

Unity Scripting Principles

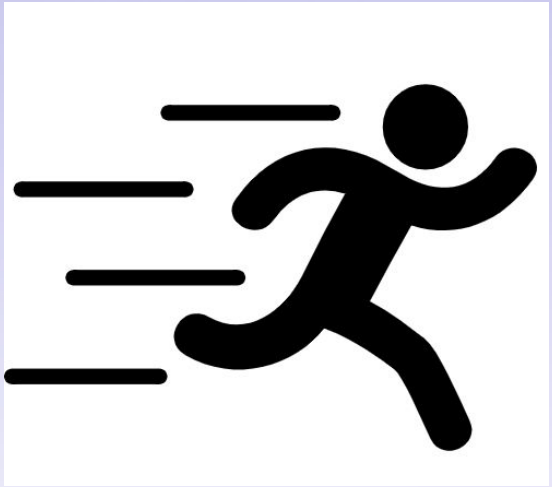
Week 3 - Day 1

What makes a game interesting?

The world needs to change!



INTERACTION



MOTION

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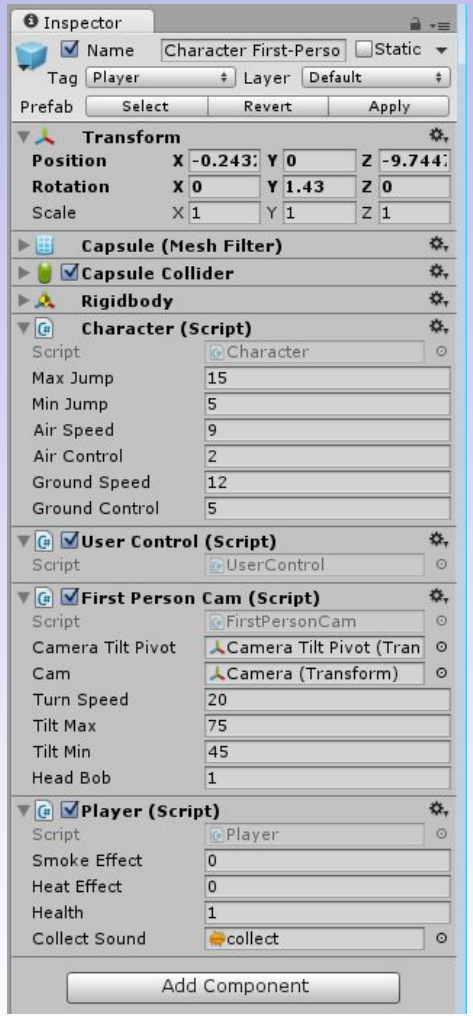
Let's Do Some Scripting!



Everything is made up components, and we can write our own components!

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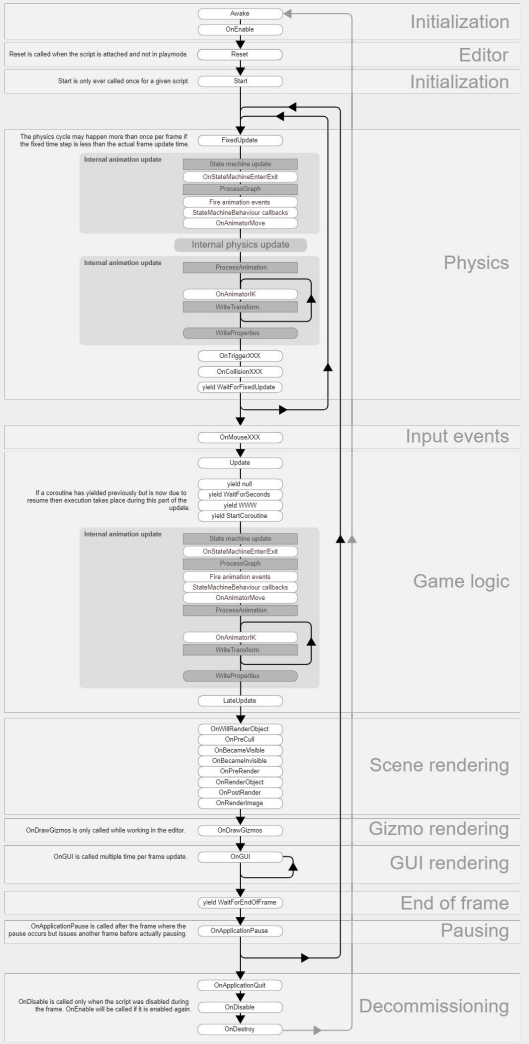
- Built-in Unity events
  - https://docs.unity3d.com/Manual/ExecutionOrder.html (40 built-in events!)
- Important: Start()
  - Called when that GameObject gets created (usually on level load or on instantiation)
- Important: Update()
  - Called every frame (usually 60 times per second)



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Scripting

```
using UnityEngine;
using System.Collections;

public class MainPlayer : MonoBehaviour
{
    public string myName;

    // Use this for initialization
    void Start ()
    {
        Debug.Log("I am alive and my name is " + myName);
    }
}
```

- Just like other Components often have properties that are editable in the inspector, you can allow values in your script to be edited from the Inspector too.
- In C#, you must declare a variable as **public** to see it in the Inspector.
- https://docs.unity3d.com/Manual/VariablesAndTheInspector.html

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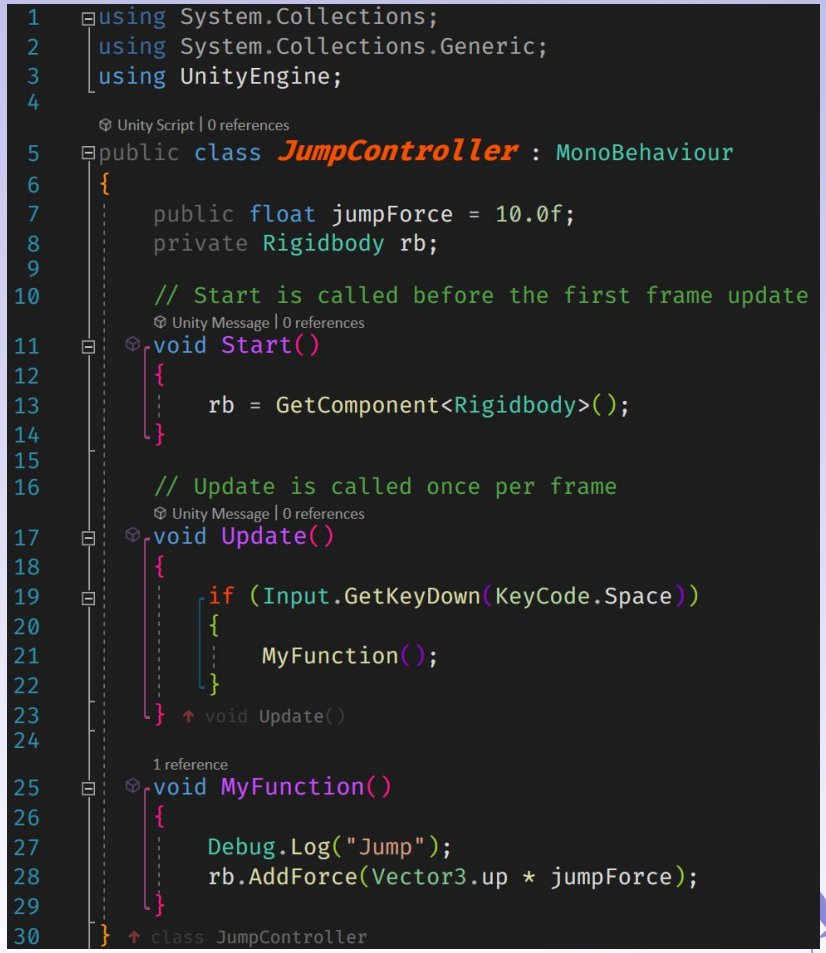
An example of a simple script.
Can you guess what this does
or how it works?



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

Unity Script | 0 references
public class JumpController : MonoBehaviour
{
    public float jumpForce = 10.0f;
    private Rigidbody rb;

    // Start is called before the first frame update
    Unity Message | 0 references
    void Start()
    {
        rb = GetComponent<Rigidbody>();
    }

    // Update is called once per frame
    Unity Message | 0 references
    void Update()
    {
        if (Input.GetKeyDown(KeyCode.Space))
        {
            MyFunction();
        }
    } ↑ void Update()

    1 reference
    void MyFunction()
    {
        Debug.Log("Jump");
        rb.AddForce(Vector3.up * jumpForce);
    }
} ↑ class JumpController
```

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What ideas do you have to make this more interesting/fun?

Feel free to explore and try things out!

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From idea to (virtual) reality

IDEAS

DOCUMENTATION

CREATION

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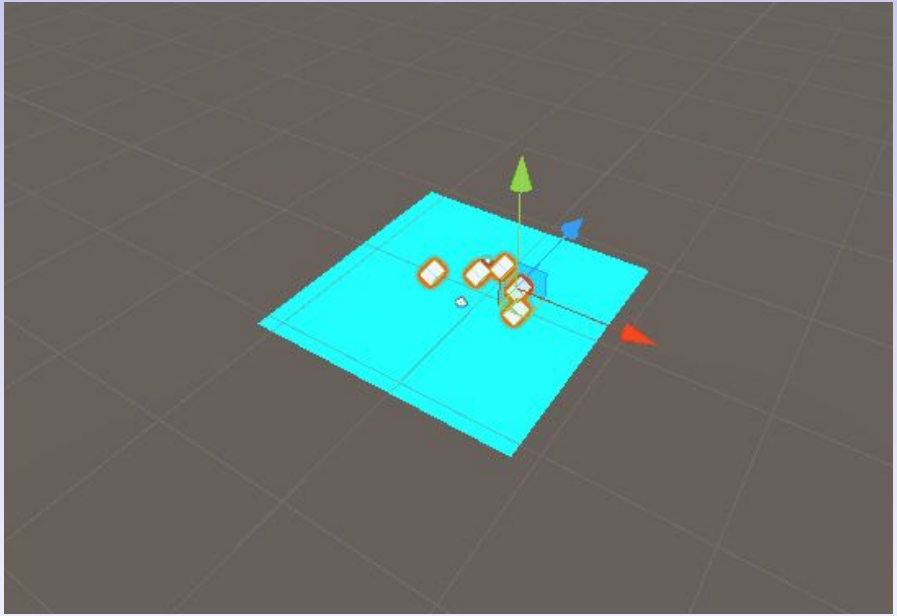
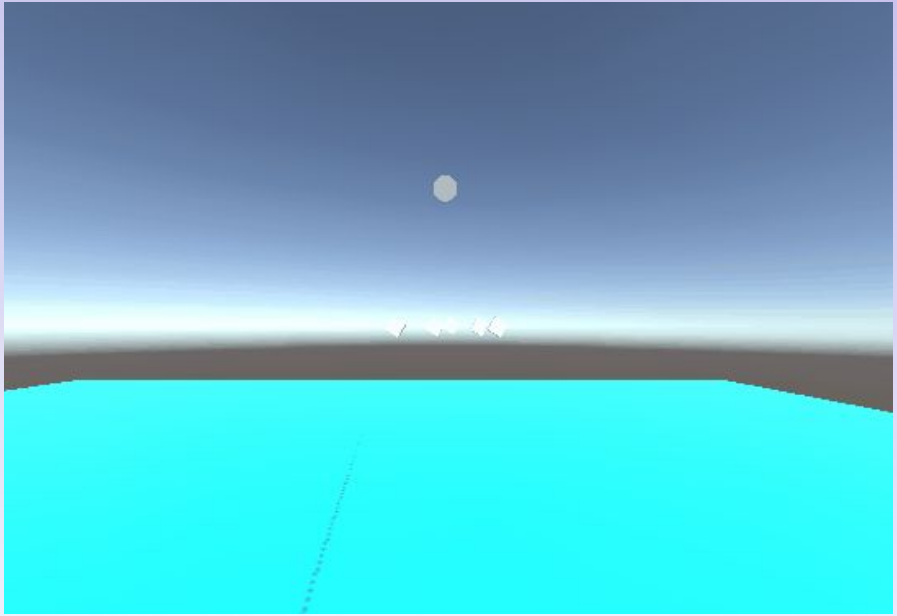
Homework





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Project Time!

https://forms.gle/qvi8q2TfqHPLoaWGA

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