



NEW TO CODING?

Dave GameDevelopment

New to Coding – What Now?

If you're still very new to coding and Unity and not yet understand the basic variables, functions and components Unity has to offer, you're going to have a hard time understanding my code, since I obviously can't explain all the basics in every script I comment.

But don't worry, you can learn all the basics by following along with the 4 steps mentioned below – It won't take that long :D

1 - Learning C#

For learning the basics of coding in C# (which are absolutely crucial for Unity programming), I would recommend the Tutorial series Brackeys created:



Playlist: <https://youtube.com/playlist?list=PLPV2Kylb3jR4CtEelGPsmPzlvP7lSPYzR>

2 - Unity Basics

For learning the basics the Unity game Engine, I recommend you to watch this video from Code Monkey:



Learn Unity in 17 Minutes: <https://youtu.be/E6A4WvsDeLE>

3 - Unity Variables

Another thing you definitely need to understand is Unity specific variables.

But that's not too complicated, basically, all you need to know is that every component you can add in the Unity inspector can also be defined and stored as a variable inside a C# script.

Variables you're going to use all the time when coding movement:

```
Unity-Skript | 0 Verweise
public class UnityVariables : MonoBehaviour
{
    // Unity Components
    public GameObject objectName;
    public Transform transformName;
    public Rigidbody rigidbodyName;
    public Camera cameraName;

    // Basic variables
    public float floatName;
    public int intName;
    public bool boolName;
    public Vector3 vectorName;

    // Special variables
    public LayerMask layerMaskName;
    public KeyCode keyCodeName = KeyCode.Space;
}
```

Explanation of the variables if you need it:

GameObject: <https://docs.unity3d.com/ScriptReference/GameObject.html>

Transform: <https://docs.unity3d.com/ScriptReference/Transform.html>

Rigidbody: <https://docs.unity3d.com/ScriptReference/Rigidbody.html>

Camera: <https://docs.unity3d.com/ScriptReference/Camera.html>

LayerMask: Example: If you put all your ground objects in a LayerMask called "whatIsGround" you can later use this LayerMask to find out if a Raycast hit an object that's inside this "whatIsGround" mask.

KeyCode: Just as the name says, it stores a KeyBoard or Mouse Key, later you can check with `Input.GetKeyDown(yourKeyCode)` if this key has been pressed.

4 - Unity Functions

Once you've watched and understood the previous recommendations you can now focus on learning the most important unity functions.

Functions you're going to encounter often in my movement scripts:

```
public class UnityFunctions : MonoBehaviour
{
    public LayerMask whatIsWall;

    public KeyCode spaceKeyCode = KeyCode.Space;

    public Rigidbody myRigidbody;

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    private void Update()
    {
        // perform a raycast
        RaycastHit myHit;
        if(Physics.Raycast(transform.position, Vector3.forward, out myHit, 500f, whatIsWall))
        {
            print("The raycast has hit a wall");
        }

        // check if a key is pressed
        if (Input.GetKeyDown(spaceKeyCode))
        {
            print("You just pressed space");
        }

        // add force to a rigidbody
        myRigidbody.AddForce(Vector3.forward * 50f, ForceMode.Impulse);
    }
}
```

Explanations:

Raycasting: https://www.youtube.com/watch?v=EINgloTG8D4&ab_channel=Unity

Inputs: <https://docs.unity3d.com/ScriptReference/Input.GetKeyDown.html>

AddForce: <https://docs.unity3d.com/ScriptReference/Rigidbody.AddForce.html>

Congrats!

If you've followed along with the last 4 steps, you're now ready to start to 10 Day Learning Plan and learn how to code full player movement in just 10 days!

Best of luck!

Also, I'd really appreciate it if you contact me over Discord and tell me if those for steps helped you out as a beginner or if I missed something :D

My Discord Server: <https://discord.com/invite/5S3bBBq>