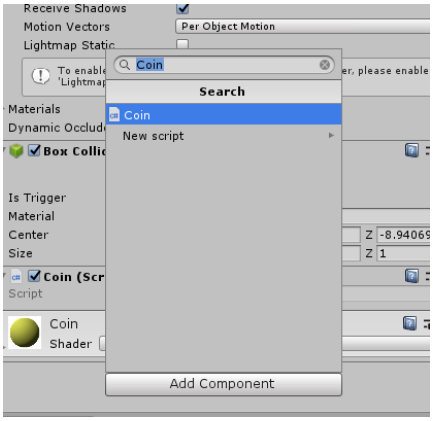
Coding Assignment Tutorial #4

Picking up coins

In this code we'll be implementing a collectable coin

1. First create a coin using either a cylinder from the hierarchy or importing a custom-made model. In this case I'll be using the object from the hierarchy, I'll be removing the capsule collider and replace it with a box collider as it works better. To do this you go to the "inspector" and then "add component". Thick "Is Trigger" beneath the box collider as we are going to be colliding into it.
2. Next, we are going to add a script to the coin object. Go to "add component" in the inspector and type in "Coin". This will allow as to make the script. This will apply the script to the coin object.
3. Once the script is loaded in. Put the following code down.




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

public class Coin : MonoBehaviour {

        // Use this for initialization
        void Start () {

        }

        // Update is called once per frame
        void Update () {
         transform.Rotate(0, 90 * Time.deltaTime, 0, 0);
        }

    private void OnTriggerEnter(Collider other)
    {
        if (other.name == "Player")
        {
            other.GetComponent<PlayerController>().points++;
            //Add 1 to points.
            Destroy(gameObject); //Destroy Objects
        }
    }
}
```

4. In the Void update, we have put transform.rotate in order to rotate the coins on their "Y axis", making the coins more distinguishable.
5. As for the private void OnTriggerEnter, if the player (Player Controller) collides with the coin object, it adds one point to the score and destroy the object. Which means we must add another code in the Player Controller, assuming you have one.

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

public class PlayerController : MonoBehaviour {

    public float speed = 18;
    public int points = 0;
    private Rigidbody rig;

       // Use this for initialization
       void Start () {

        rig = GetComponent<Rigidbody>();
       }

       // Update is called once per frame
       void Update () {

        float hAxis = Input.GetAxis("Horizontal");
        float vAxis = Input.GetAxis("Vertical");

        Vector3 movement = new Vector3(hAxis, 0, vAxis) * speed * Time.deltaTime;
        rig.MovePosition(transform.position + movement);
       }

    private void OnGUI()
    {
        GUI.Label(new Rect(10, 10, 100, 20), "Score : " + points);
    }
}
```

6. This is a code I have made for the player. The first code I have add relating to this topic was the variable “public int points = 0” which means that we are starting the game with 0 points.
7. The next piece of code is written within the private void “OnGUI()”. This part is basically going to show you the points collected on the top left of the screen. Constantly showing the points all the time.