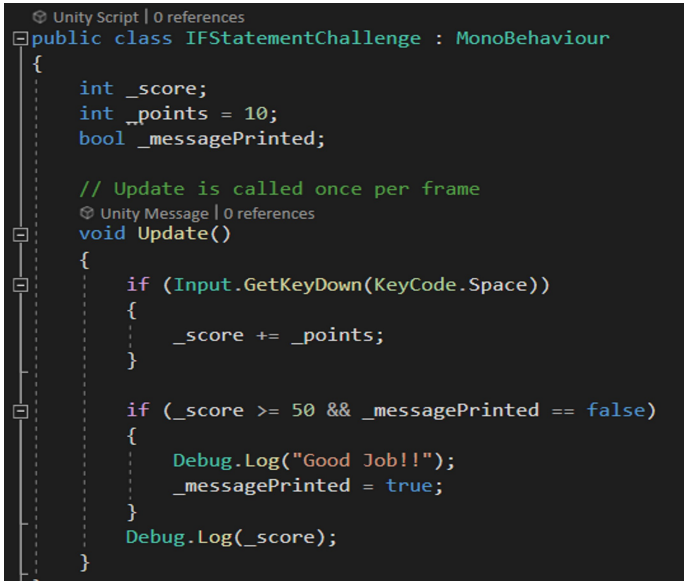


IF Statements

Thursday, December 31, 2020 4:09 PM

Create game logic based on conditions. Can only be run in methods.

```
if ( condition )
{
    Run code
}
```

A screenshot of a Unity Script editor showing a C# script named IFStatementChallenge. The script is a MonoBehaviour class. It has three private variables: _score (int), _points (int, initialized to 10), and _messagePrinted (bool). A comment indicates that the Update method is called once per frame. The Update method contains two if statements. The first if statement checks if the Space key is pressed, and if true, it increments _score by _points. The second if statement checks if _score is greater than or equal to 50 and _messagePrinted is false. If true, it logs "Good Job!!" and sets _messagePrinted to true. Finally, it logs the current value of _score.

```
Unity Script | 0 references
public class IFStatementChallenge : MonoBehaviour
{
    int _score;
    int _points = 10;
    bool _messagePrinted;

    // Update is called once per frame
    void Update()
    {
        if (Input.GetKeyDown(KeyCode.Space))
        {
            _score += _points;
        }

        if (_score >= 50 && _messagePrinted == false)
        {
            Debug.Log("Good Job!!");
            _messagePrinted = true;
        }
        Debug.Log(_score);
    }
}
```

Else: condition to run if the if statement condition isn't met.

Else If

- Check for multiple conditions
- No limit

```

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

Unity Script | 0 references
public class IFSpeed : MonoBehaviour
{
    [SerializeField] float _speed;

    // Update is called once per frame
    Unity Message | 0 references
    void Update()
    {
        _speed += Time.deltaTime;
        Debug.Log(Mathf.Round(_speed));

        if (Input.GetKeyDown(KeyCode.W))
        {
            _speed += 5;
        }
        else if (Input.GetKeyDown(KeyCode.S))
        {
            _speed -= 5;
        }

        if (_speed > 20)
        {
            Debug.Log("Slow down!");
        }
        else if (_speed <= 0)
        {
            _speed = 0;
            Debug.Log("Speed Up!");
        }
    }
}

```

```

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

Unity Script | 0 references
public class IFCube : MonoBehaviour
{
    [SerializeField] int _score;
    int _points = 10;
    [SerializeField] GameObject cube;
    Color cubecolor;

    // Start is called before the first frame update
    Unity Message | 0 references
    void Start()
    {
        cube.GetComponent<Renderer>().material.color = Color.red;
    }

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

        if (_score == 50)
        {
            cube.GetComponent<Renderer>().material.color = Color.green;
        }

        else if (_score > 50)
        {
            cube.GetComponent<Renderer>().material.color = Color.blue;
        }

        Debug.Log(_score);
    }
}

```