## 编写一个简单的自定义 Component, 用自定义组件定义几种飞碟, 做成预制

- •参考官方手册 https://docs.unity3d.com/ScriptReference/Editor.html
- •实现自定义组件,编辑并赋予飞碟一些属性

## Transform组件变量

属性	说明
position	在世界坐标系中,transform的位置
IocalPosition	相对于父级的变换的位置
eulerAngles	旋转作为欧拉角度
localEulerAngles	相对于父级的变换的旋转欧拉角度
rotation	在世界坐标系中物体变换的旋转角度作为 Quaternion储存
parent	返回物体变换的父级
root	返回最高层次的

## 为一个组件添加自己自定义的编辑器内容

1 [CustomEditor(typeof(ShowArea))]

Editor.OnInspectorGUI

通过实现该函数来制作自定义的Inspector面板。

```
1 Vector3 startPosition =
EditorGUILayout.Vector3Field("StartPosition",UFO.startPosition); //文本, 数值域
UFO.startPosition = startPosition;
```

## 结果展示

```
//UFO.cs
    using UnityEngine;
 4
    namespace HitUFO
 5
 6
        public class UFO: MonoBehaviour
 7
            public int score = 0; //设置飞碟得分
 8
            public static Vector3 startPosition = new Vector3(0, 0, 0); //设置初
 9
    始位置
10
            public static Vector3 startSpeed = new Vector3(1, 1, 0); //设置初始速
    度
11
            public static Vector3 localScale = new Vector3(1, 1, 1); //设置缩放比
    例
12
            private int Left_or_Right;
13
            public Vector3 GetSpeed()
14
15
16
                //向左还是向右运动
17
                Vector3 v = startSpeed;
18
                v.x *= Left_or_Right;
19
                return v;
20
21
22
            public void SetSide(int lr,float dy)
23
                Vector3 v = startPosition;
24
25
                v.x = 1r;
26
                v.y += dy;
27
                transform.position = v;
                Left_or_Right = 1r;
28
29
            }
30
31
            public void SetLocalScale(float x,float y,float z)
32
                Vector3 lc = localScale;
33
                1c.x *= x;
34
35
                lc.y *= y;
36
                1c.z *= z;
                transform.localScale = lc;
37
38
            }
39
        }
40 }
```

```
//SetGui.cs
using UnityEngine;
using UnityEditor;

namespace HitUFO{
```

```
[CustomEditor(typeof(UFO))]
 7
    public class SetGui : Editor //继承editor类
 8
 9
        public override void OnInspectorGUI()
10
            var target = (UFO)serializedObject.targetObject; //获取对象
11
12
13
            EditorGUILayout.Space(); //空行
14
            Vector3 startPosition =
    EditorGUILayout.Vector3Field("StartPosition", UFO.startPosition); //文本, 数值
15
            UFO.startPosition = startPosition;
16
17
            EditorGUILayout.Space();
            Vector3 startSpeed =
18
    EditorGUILayout.Vector3Field("StartSpeed", UFO. startSpeed);
19
            UFO.startSpeed = startSpeed;
20
21
            EditorGUILayout.Space();
            Vector3 localScale =
22
    EditorGUILayout.Vector3Field("LocalScale", UFO.localScale);
23
            UFO.localScale = startPosition;
24
        }
25
    }
26
   }
```

