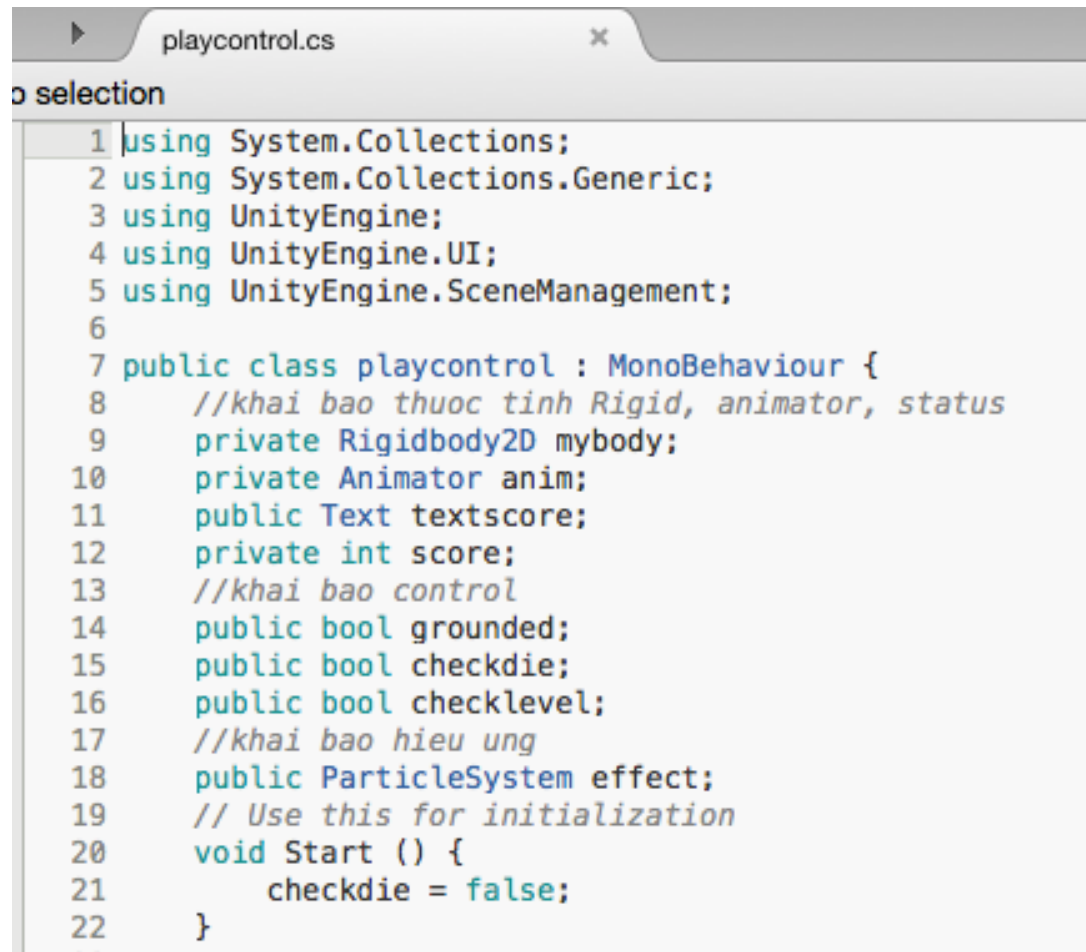


Game nang cao - Bai 3

HungNQ

Import, khai báo biến



```
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4 using UnityEngine.UI;
5 using UnityEngine.SceneManagement;
6
7 public class playcontrol : MonoBehaviour {
8     //khai bao thuoc tinh Rigid, animator, status
9     private Rigidbody2D mybody;
10    private Animator anim;
11    public Text textscore;
12    private int score;
13    //khai bao control
14    public bool grounded;
15    public bool checkdie;
16    public bool checklevel;
17    //khai bao hieu ung
18    public ParticleSystem effect;
19    // Use this for initialization
20    void Start () {
21        checkdie = false;
22    }
```

Hàm

```
24  void Awake()  
25  {  
26      //anh xa doi tuong trong Hierachy  
27      mybody=GetComponent<Rigidbody2D>();  
28      //anh xa animator trong tai nguyen  
29      anim=GetComponent<Animator>();  
30  }  
31  
32  // Update is called once per frame  
33  void Update () {  
34      Control();  
35  }
```

Hàm control

```
37 public void Control()  
38 {  
39     //khai bao gia tri ban dau  
40     float forceX = 0f;  
41     float forceY = 0f;  
42     //khai bao gia tri nhan van toc hien tai cua character  
43     float velo=Mathf.Abs(mybody.velocity.x);  
44     //nhan hanh dong tu ban phim  
45     float key=Input.GetAxisRaw("Horizontal");  
46     //-----
```

Hàm control

```
46      //-----  
47      //kiem tra xem nguoi dung nhan vao phim mui ten trai hay phai (run)  
48      if (key > 0) {  
49          //kiem tra van toc  
50          if (velo < 4f) {  
51                
52              forceX = 15f;  
53          }  
54      }
```

Hàm control

```
55      //thuc hien hanh dong di chuyen
56      anim.SetBool ("walked", true);
57      //hanh dong xoay mat
58      Vector2 scale = transform.localScale;
59      scale.x = 1.5f;
60      transform.localScale = scale;
```

Hàm control

```
61     } else if (key < 0) {  
62  
63         //kiem tra van toc  
64         if (velo < 4) {  
65             forceX = -15f;  
66         }
```

Hàm control

```
67      //gan trang thai
68      anim.SetBool ("walked", true);
69      //xoay mat
70      Vector2 scale = transform.localScale;
71      scale.x = -1.5f;
72      transform.localScale = scale;
73  } else {
74      anim.SetBool ("walked", false);
75  }
76  //-----
```


Hàm control

```
77      //jump-----  
78      if (Input.GetKey (KeyCode.Space)) {  
79          //chi nhay khi cham tren dat  
80          if (grounded) {  
81              forceY = 300f;  
82              grounded = false;  
83              anim.SetBool ("jump", true);  
84          } else {  
85              anim.SetBool ("jump", false);  
86          }  
87      }  
88  }  
89
```

Hàm control

```
89
90     //check die
91     if (checkdie) {
92         anim.SetBool ("playdie", true);
93     }
94     //cap nhat thong tin vi tri
95     mybody.AddForce(new Vector2(forceX,forceY));
96 }
```

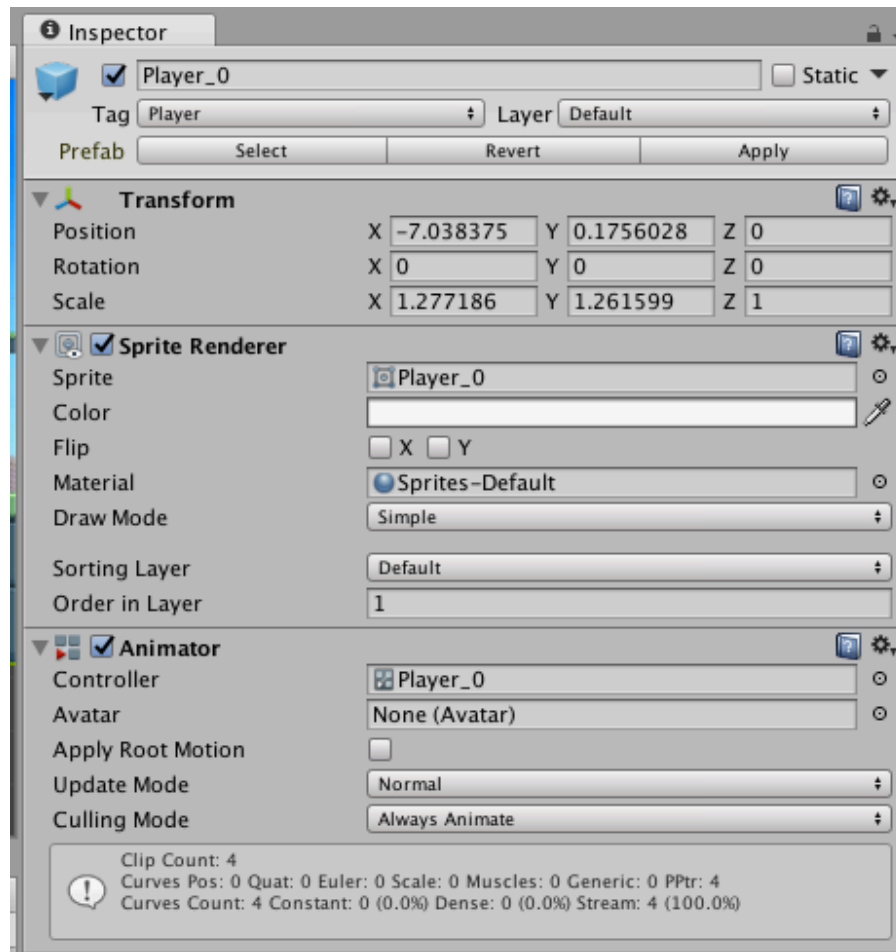
Hàm OnCollisionEnter2D

```
97 //ham kiem tra va cham
98 void OnCollisionEnter2D(Collision2D target)
99 {
100     if (target.gameObject.tag == "Botton") {
101         grounded = true;
102     }
103     if (target.gameObject.tag == "Cret") {
104         checkdie = true;
105         SceneManager.LoadScene ("gameover");
106     }
107     if (target.gameObject.tag == "Home") {
108         checkdie = true;
109         SceneManager.LoadScene ("level2");
110     }
111 }
112 }
```

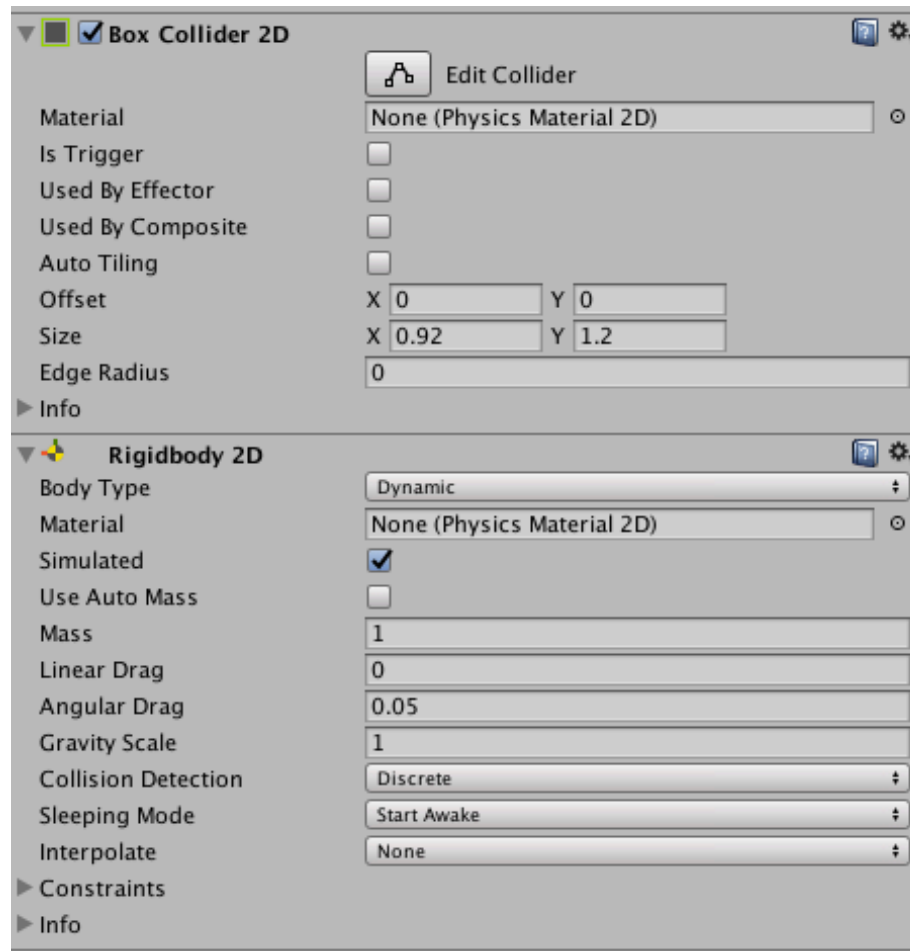
Hàm OnTriggerEnter2D

```
114 //kiem tra va cham kieu trigger|
115 void OnTriggerEnter2D(Collider2D other)
116 {
117     //neu va cham voi coi, an diem
118     if (other.gameObject.CompareTag ("Coin")) {
119         Animator otheranim = other.gameObject.GetComponent<Animator> () as Animator;
120         otheranim.SetBool ("Eat", true);
121         score = score + 1;
122         textscore.text = "Score: " + score.ToString ();
123         Destroy (other.gameObject, 1);
124         //hieung
125         Instantiate(effect,transform.position,transform.rotation);
126         Destroy (other);
127     }
128     if (other.gameObject.CompareTag ("Box")) {
129         Animator otheranim = other.gameObject.GetComponent<Animator> () as Animator;
130         otheranim.SetBool ("Checkbox", true);
131         Destroy (other.gameObject, 1);
132     }
133 }
134 }
```

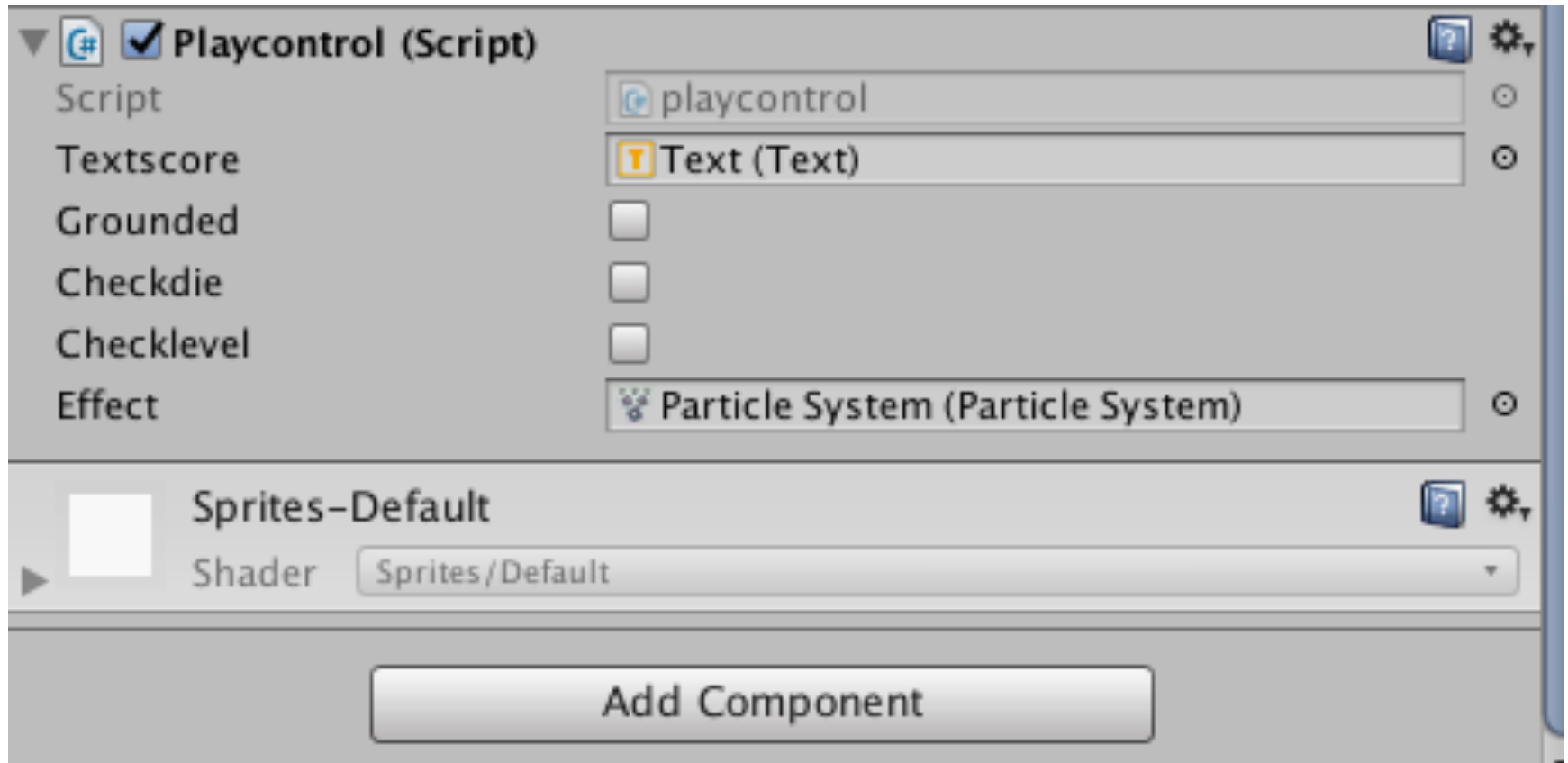
Cấu hình player



Cấu hình player



Cấu hình player



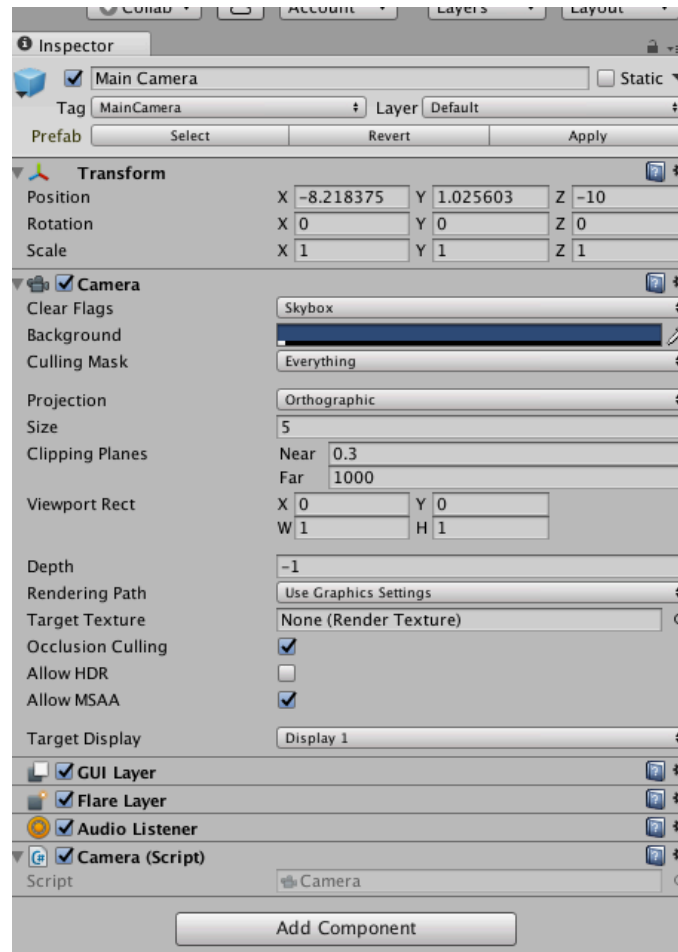
Code Camera



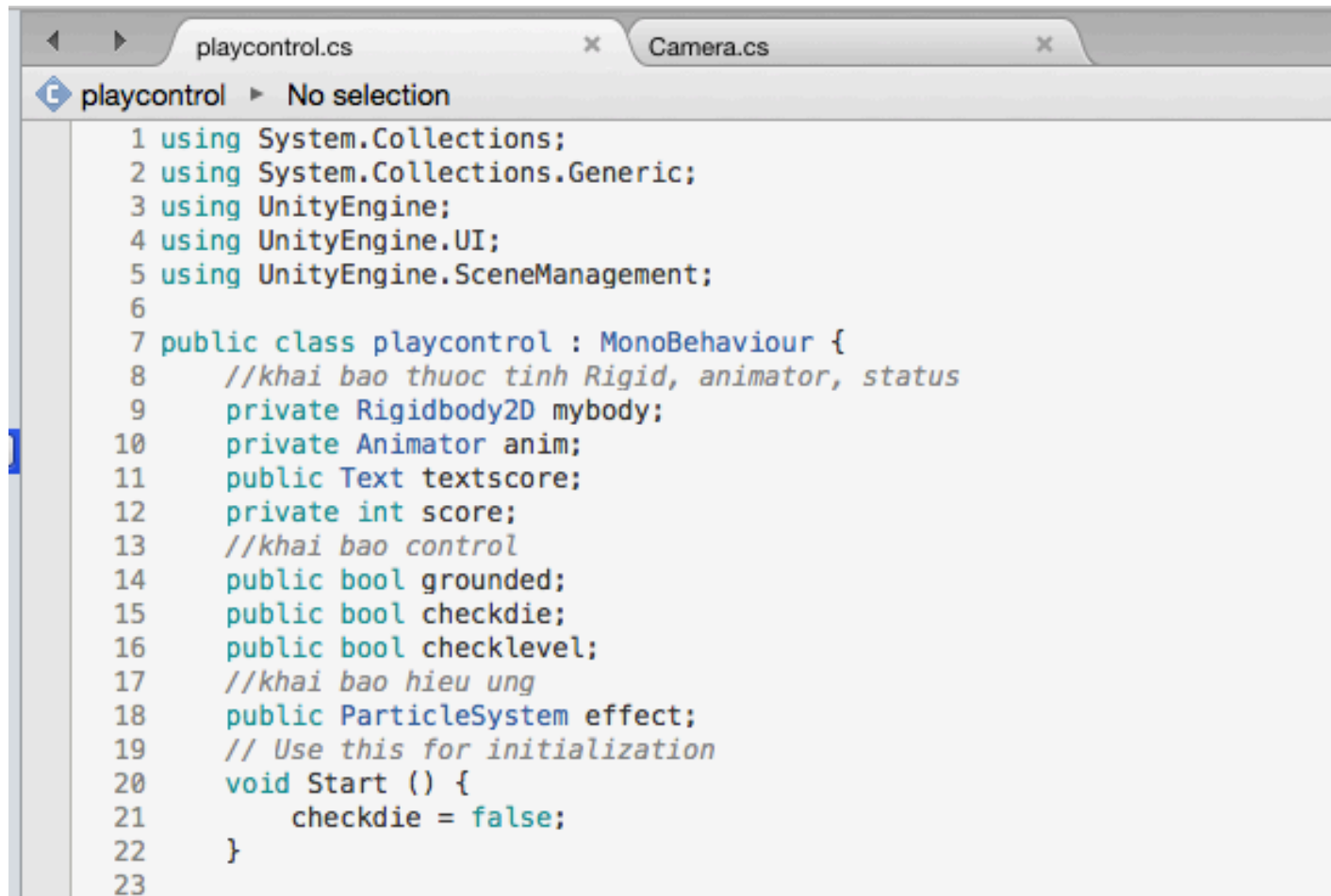
The image shows a screenshot of a code editor window with two tabs: 'playcontrol.cs' and 'Camera.cs'. The 'Camera.cs' tab is active, displaying the following C# code:

```
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4
5 public class Camera : MonoBehaviour {
6
7     private Transform player;
8
9     // Use this for initialization
10    void Start () {
11        player = GameObject.Find ("Player_0").transform;
12    }
13
14    // Update is called once per frame
15    void Update () {
16
17        if (player != null) {
18            Vector3 temp = transform.position;
19            temp.x = player.position.x;
20            transform.position = temp;
21        }
22    }
23 }
24 }
25
```


Cấu hình camera



Code



The image shows a screenshot of a Unity IDE window. At the top, there are two tabs: 'playcontrol.cs' and 'Camera.cs'. The 'playcontrol.cs' tab is active, and the script is displayed in the main editor area. The script is a C# class named 'playcontrol' that inherits from 'MonoBehaviour'. It includes several using statements at the top: 'System.Collections', 'System.Collections.Generic', 'UnityEngine', 'UnityEngine.UI', and 'UnityEngine.SceneManagement'. The class contains several private and public variables, including 'Rigidbody2D mybody', 'Animator anim', 'Text textscore', 'int score', 'bool grounded', 'bool checkdie', 'bool checklevel', and 'ParticleSystem effect'. It also has a 'Start' method that initializes 'checkdie' to false. The code is written in a light blue font on a white background, with line numbers 1 through 23 visible on the left side of the editor.

```
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4 using UnityEngine.UI;
5 using UnityEngine.SceneManagement;
6
7 public class playcontrol : MonoBehaviour {
8     //khai bao thuoc tinh Rigid, animator, status
9     private Rigidbody2D mybody;
10    private Animator anim;
11    public Text textscore;
12    private int score;
13    //khai bao control
14    public bool grounded;
15    public bool checkdie;
16    public bool checklevel;
17    //khai bao hieu ung
18    public ParticleSystem effect;
19    // Use this for initialization
20    void Start () {
21        checkdie = false;
22    }
23
```

23

24

```
void Awake()
```

25

```
{
```

26

```
    //anh xa doi tuong trong Hierachy
```

27

```
    mybody=GetComponent<Rigidbody2D>();
```

28

```
    //anh xa animator trong tai nguyen
```

29

```
    anim=GetComponent<Animator>();
```

30

```
}
```

31

32

```
// Update is called once per frame
```

33

```
void Update () {
```

34

```
    Control();
```

35

```
}
```

36

```

37 public void Control()
38 {
39     //khai bao gia tri ban dau
40     float forceX = 0f;
41     float forceY = 0f;
42     //khai bao gia tri nhan van toc hien tai cua character
43     float velo=Mathf.Abs(mybody.velocity.x);
44     //nhan hanh dong tu ban phim
45     float key=Input.GetAxisRaw("Horizontal");
46     //-----
47     //kiem tra xem nguoi dung nhan vao phim mui ten trai hay phai (run)
48     if (key > 0) {
49         //kiem tra van toc
50         if (velo < 4f) {
51
52             forceX = 15f;
53         }
54
55         //thuc hien hanh dong di chuyen
56         anim.SetBool ("walked", true);
57         //hanh dong xoay mat
58         Vector2 scale = transform.localScale;
59         scale.x = 1.5f;
60         transform.localScale = scale;
61     } else if (key < 0) {
62
63         //kiem tra van toc
64         if (velo < 4) {
65             forceX = -15f;
66         }
67         //gan trang thai
68         anim.SetBool ("walked", true);
69         //xoay mat
70         Vector2 scale = transform.localScale;
71         scale.x = -1.5f;
72         transform.localScale = scale;
73     } else {
74         anim.SetBool ("walked", false);
75     }
76     //-----

```

```
77 | //jump-----  
78 | if (Input.GetKey (KeyCode.Space)) {  
79 |     //chi nhay khi cham tren dat  
80 |     if (grounded) {  
81 |         forceY = 300f;  
82 |         grounded = false;  
83 |         anim.SetBool ("jump", true);  
84 |     } else {  
85 |         anim.SetBool ("jump", false);  
86 |     }  
87 |  
88 | }  
89 |  
90 | //check die  
91 | if (checkdie) {  
92 |     anim.SetBool ("playdie", true);  
93 | }  
94 | //cap nhat thong tin vi tri  
95 | mybody.AddForce(new Vector2(forceX,forceY));  
96 | }
```

```
97 //ham kiem tra va cham
98 void OnCollisionEnter2D(Collision2D target)
99 {
100     if (target.gameObject.tag == "Botton") {
101         grounded = true;
102     }
103     if (target.gameObject.tag == "Cret") {
104         checkdie = true;
105         SceneManager.LoadScene ("gameover");
106     }
107     if (target.gameObject.tag == "Home") {
108         checkdie = true;
109         SceneManager.LoadScene ("level2");
110     }
111 }
112
113
```

```

114 //kiem tra va cham kieu trigger
115 void OnTriggerEnter2D(Collider2D other)
116 {
117     //neu va cham voi coi, an diem
118     if (other.gameObject.CompareTag ("Coin")) {
119         Animator otheranim = other.gameObject.GetComponent<Animator> () as Animator;
120         otheranim.SetBool ("Eat", true);
121         score = score + 1;
122         textscore.text = "Score: " + score.ToString ();
123         Destroy (other.gameObject, 1);
124         //hieung
125         Instantiate(effect,transform.position,transform.rotation);
126         Destroy (other);
127     }
128     if (other.gameObject.CompareTag ("Box")) {
129         Animator otheranim = other.gameObject.GetComponent<Animator> () as Animator;
130         otheranim.SetBool ("Checkbox", true);
131         Destroy (other.gameObject, 1);
132     }
133 }
134 }

```