

PlayerMove ▶ MovePlayer ()

```
1 using UnityEngine;
2 using System.Collections;
3
4 public class PlayerMove : MonoBehaviour
5 {
6     public float moveSpeed;
7     public float turnSpeed;
8
9     private float _turn;
10    private float _curDir;
11    private float _gravity = 200f;
12
13    private Vector3 _moveDir = Vector3.zero;
14    private Vector3 _curNormal = Vector3.up;
15
16    private Quaternion _groundTilt;
17
18    private CharacterController controller;
19
20    // Use this for initialization
21    void Start ()
22    {
23        controller = GetComponent<CharacterController>();
24    }
25
26    // Update is called once per frame
27    void Update ()
28    {
29        MovePlayer();
30    }
31
32    void MovePlayer()
33    {
34        if(controller.isGrounded)
35        {
36            _turn = Input.GetAxis("Horizontal") * turnSpeed * Time.deltaTime;
37            _curDir = (_curDir + _turn) % 360;
38
39            RaycastHit down;
40
41            if(Physics.Raycast(transform.position, -_curNormal, out down))
42            {
43                _curNormal = Vector3.Lerp(_curNormal, down.normal, 10 * Time.deltaTime);
44                _groundTilt = Quaternion.FromToRotation(Vector3.up, _curNormal);
45                transform.rotation = _groundTilt * Quaternion.Euler(0, _curDir, 0);
46            }
47
48            _moveDir = transform.forward * Input.GetAxis("Vertical") * moveSpeed;
49        }
50
51        _moveDir.y -= _gravity * Time.deltaTime;
52        controller.Move(_moveDir * Time.deltaTime);
53    }
54 }
```