using UnityEngine;

using UnityEngine.SceneManagement;

public class PlayerMovement : MonoBehaviour

{

bool alive = true;

public float speed = 5;

public Rigidbody rb;

float horizontalInput;

public float horizontalMultiplier = 2;

public float speedIncreasePerPoint = 0.1f;

public float jumpForce = 400f;

public LayerMask groundMask;

public bool isJumping = true;

private void FixedUpdate()

{

if (!alive) return;

Vector3 forwardMove = transform.forward \* speed \* Time.fixedDeltaTime;

Vector3 horizontalMove = transform.right \* horizontalInput \* speed \* Time.fixedDeltaTime \* horizontalMultiplier;

rb.MovePosition(rb.position + forwardMove + horizontalMove);

}

// Update is called once per frame

void Update()

{

horizontalInput = Input.GetAxis("Horizontal");

if ( Input.GetKeyDown(KeyCode.Space))

{

Jump();

}

if (transform.position.y < -5)

{

Die();

}

}

public void Die()

{

alive = false;

//Restart

Invoke("Restart", 2);

}

void Restart()

{

SceneManager.LoadScene(SceneManager.GetActiveScene().name);

}

void Jump()

{

//check if in ground

float height = GetComponent<Collider>().bounds.size.y;

bool isGrounded = Physics.Raycast(transform.position, Vector3.down, (height/2) + 0.1f, groundMask);

//if on the ground then the character will jump

if(isGrounded == true)

{

rb.AddForce(Vector3.up \* jumpForce);

}

}

}