**Códigos para juego Platformer Fox Hunt**

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**Código Jugador Principal**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.UI;

public class PlayerController : MonoBehaviour

{

    public Rigidbody2D rb;

    public Animator anim;

    public enum State {idle, running, jumping, falling, hurt}

    private State state = State.idle;

    private Collider2D coll;

   public LayerMask ground;

   public float speed = 5f;

   public float jumpForce = 10f;

   public int gem = 0;

   public Text gemtext;

   public float hurtForce = 10f;

    private void Start ()

    {

        rb = GetComponent<Rigidbody2D>();

        anim = GetComponent<Animator>();

        coll = GetComponent<Collider2D>();

    }

private void Update ()

{

    if (state != State.hurt)

    {

        Movement();

    }

    VelocityState();

    anim.SetInteger("state", (int)state);

}

private void Movement ()

{

    float hDirection = Input.GetAxis("Horizontal");

if(hDirection < 0)

    {

        rb.velocity = new Vector2 (-speed,rb.velocity.y);

        transform.localScale = new Vector2(-1,1);

    }

    else if(hDirection > 0)

    {

        rb.velocity = new Vector2 (speed,rb.velocity.y);

         transform.localScale = new Vector2(1,1);

    }

    else {

    }

    if(Input.GetButtonDown("Jump") && coll.IsTouchingLayers(ground))

    {

       Jump();

    }

        VelocityState();

        anim.SetInteger("state", (int)state);

}

private void VelocityState()

{

if (state == State.jumping)

{

    if (rb.velocity.y < .1f)

    {

    state = State.falling;

    }

}

else if (state == State.falling)

{

    if(coll.IsTouchingLayers(ground))

    {

        state = State.idle;

    }

}

else if (state == State.hurt)

{

    if (Mathf.Abs(rb.velocity.x) < .1f)

    {

        state = State.idle;

    }

}

    else if (Mathf.Abs(rb.velocity.x) > 2f)

    {

        state = State.running;

    }

    else

    {

        state = State.idle;

    }

}

private void OnTriggerEnter2D(Collider2D collision)

{

if (collision.tag == "Collectable")

    {

        Destroy(collision.gameObject);

        gem += 1;

        gemtext.text = gem.ToString();

    }

}

private void OnCollisionEnter2D(Collision2D other)

{

if (other.gameObject.tag == "Enemy")

    {

        Frog frog = other.gameObject.GetComponent<Frog>();

        if (state == State.falling)

        {

            frog.JumpedOn();

            Jump();

        }

        else{

            state = State.hurt;

            if (other.gameObject.transform.position.x > transform.position.x)

                {

                    rb.velocity = new Vector2 (-hurtForce, rb.velocity.y);

                }

                else

                {

                      rb.velocity = new Vector2 (hurtForce, rb.velocity.y);

                }

            }

    }

}

private void Jump()

{

    rb.velocity = new Vector2 (rb.velocity.x, jumpForce);

        state = State.jumping;

}

}

**Código Enemigos (Rana)**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class Frog : MonoBehaviour

{

   public float leftCap;

   public  float rightCap;

   public float jumpLength =10f;

   public float jumpHeight =15f;

   private Collider2D coll;

   public LayerMask ground;

   private Rigidbody2D rb;

   private Animator anim;

private bool facingLeft = true;

private void Start()

{

    coll = GetComponent<Collider2D>();

    rb = GetComponent<Rigidbody2D>();

    anim = GetComponent<Animator>();

}

private void Update()

{

if (anim.GetBool("Jumping"))

{

        if (rb.velocity.y < .1)

        {

            anim.SetBool("Falling", true);

            anim.SetBool("Jumping", false);

        }

}

if (coll.IsTouchingLayers(ground) && anim.GetBool("Falling"))

{

    anim.SetBool ("Falling", false);

}

}

private void Move()

{

    if (facingLeft)

    {

        if (transform.position.x > leftCap)

        {

            if (transform.localScale.x != 1)

            {

                transform.localScale = new Vector3(1, 1);

            }

            if (coll.IsTouchingLayers(ground))

            {

                rb.velocity = new Vector2(-jumpLength, jumpHeight);

                anim.SetBool("Jumping", true);

            }

        }

        else

        {

            facingLeft = false;

        }

    }

    else

    {

        if (transform.position.x < rightCap)

        {

            if (transform.localScale.x != -1)

            {

                transform.localScale = new Vector3(-1, 1);

            }

            if (coll.IsTouchingLayers(ground))

            {

                rb.velocity = new Vector2(jumpLength, jumpHeight);

                anim.SetBool("Jumping", true);

            }

        }

        else

        {

            facingLeft = true;

        }

    }

}

public void JumpedOn()

{

anim.SetTrigger("Death");

}

private void Death()

{

    Destroy(this.gameObject);

}

}