Player Animations 2D

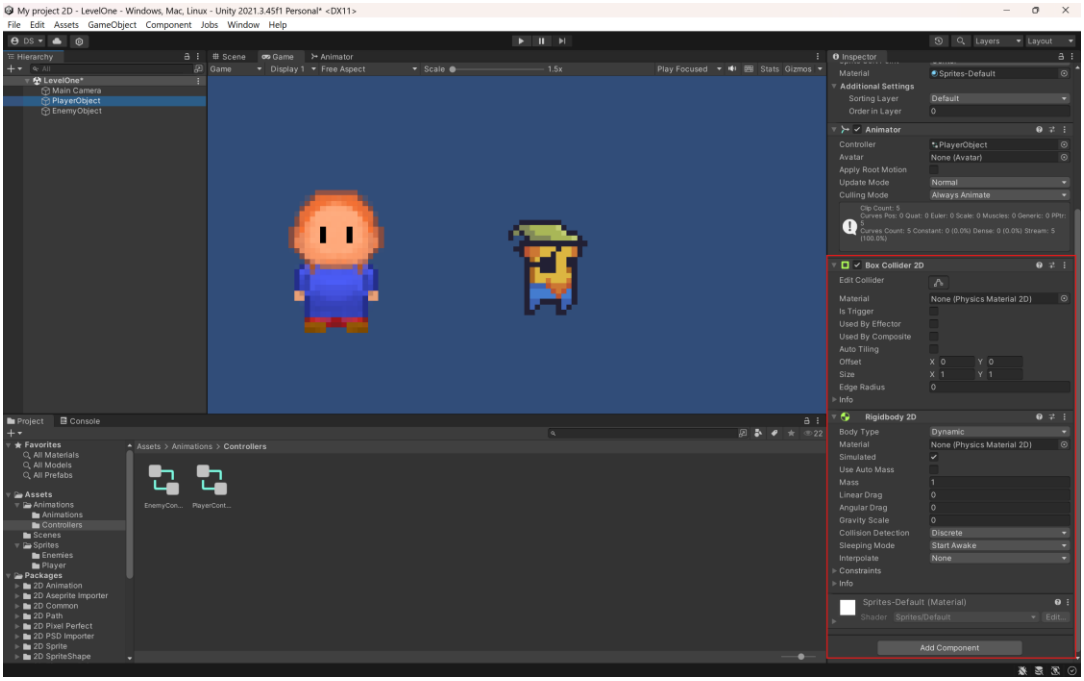
Segunda parte

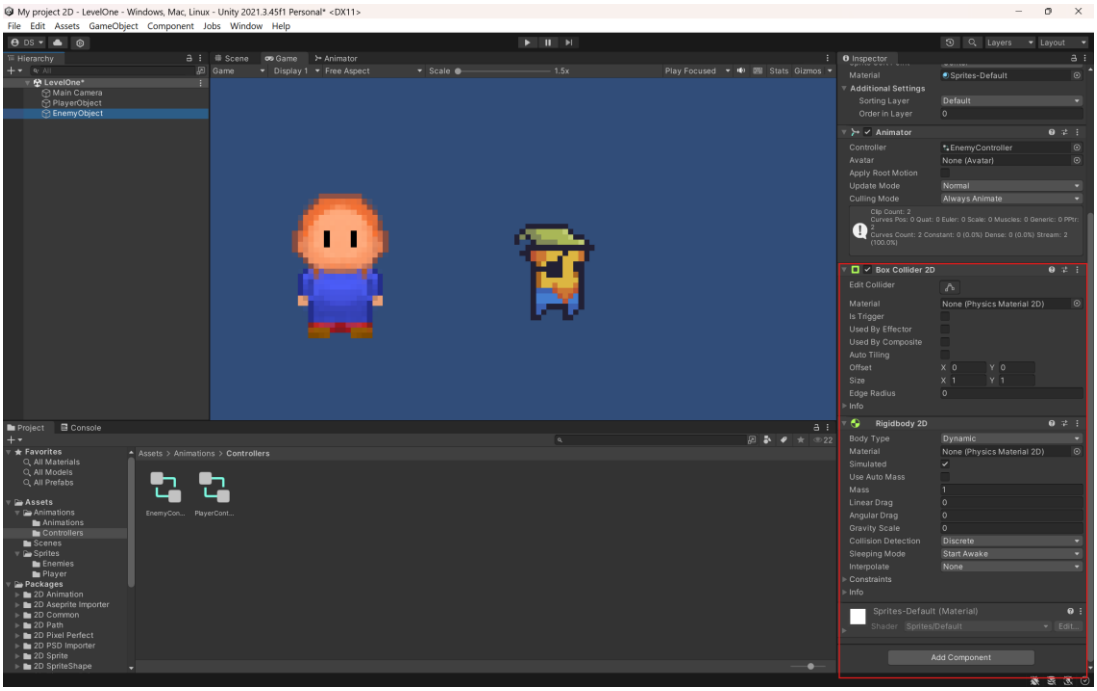
Dalia del Carmen Mendiola Soto GIDS5101

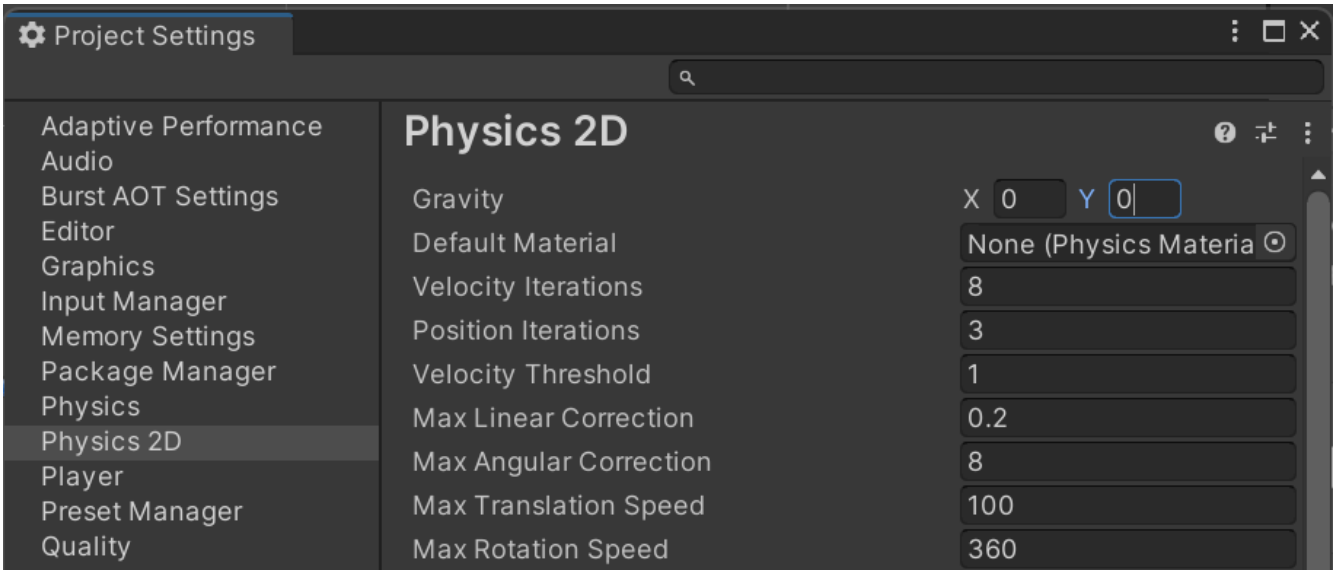
Link de video de funcionamiento

https://drive.google.com/file/d/13w16PGNkCqFl7yzlpS9xJseq515oOLze/view?usp=sharing

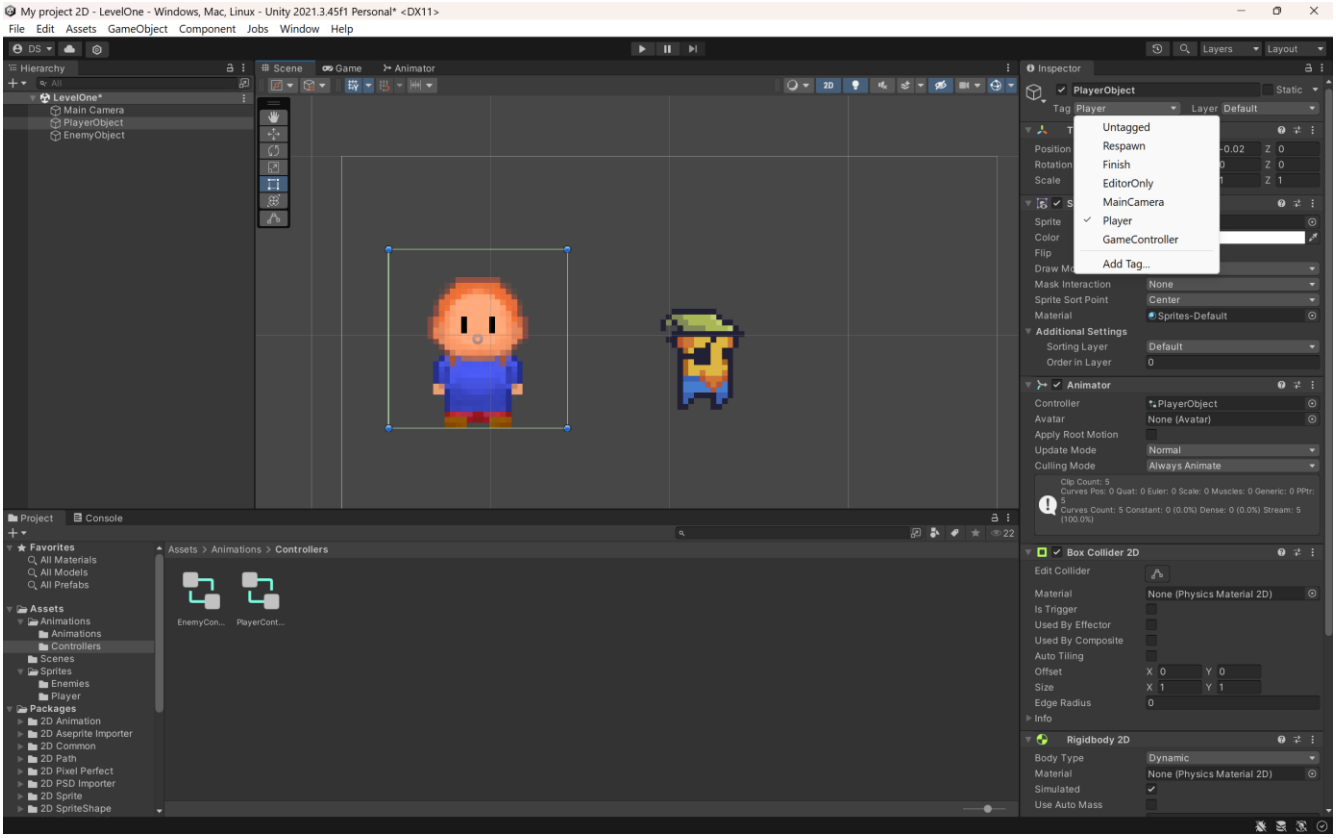
Componente RigidBody

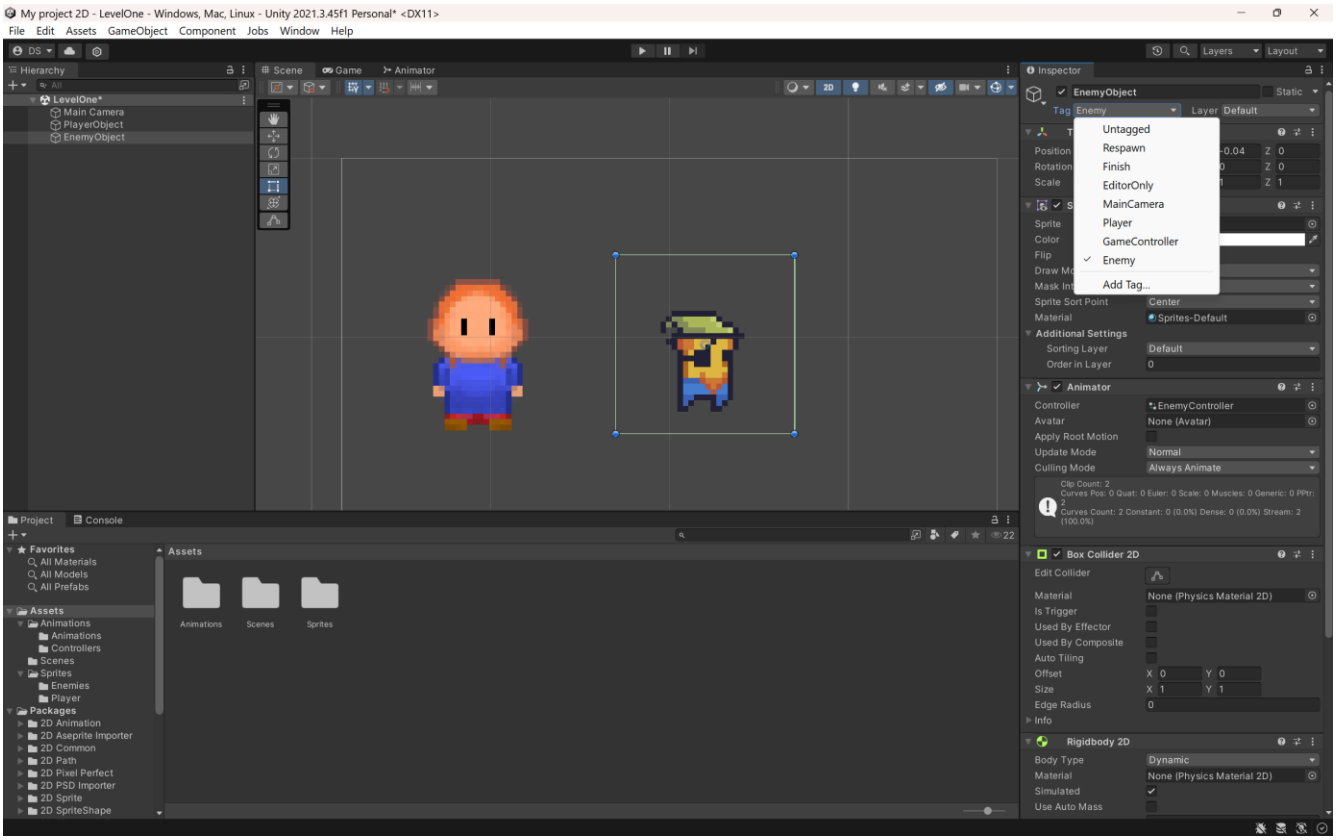




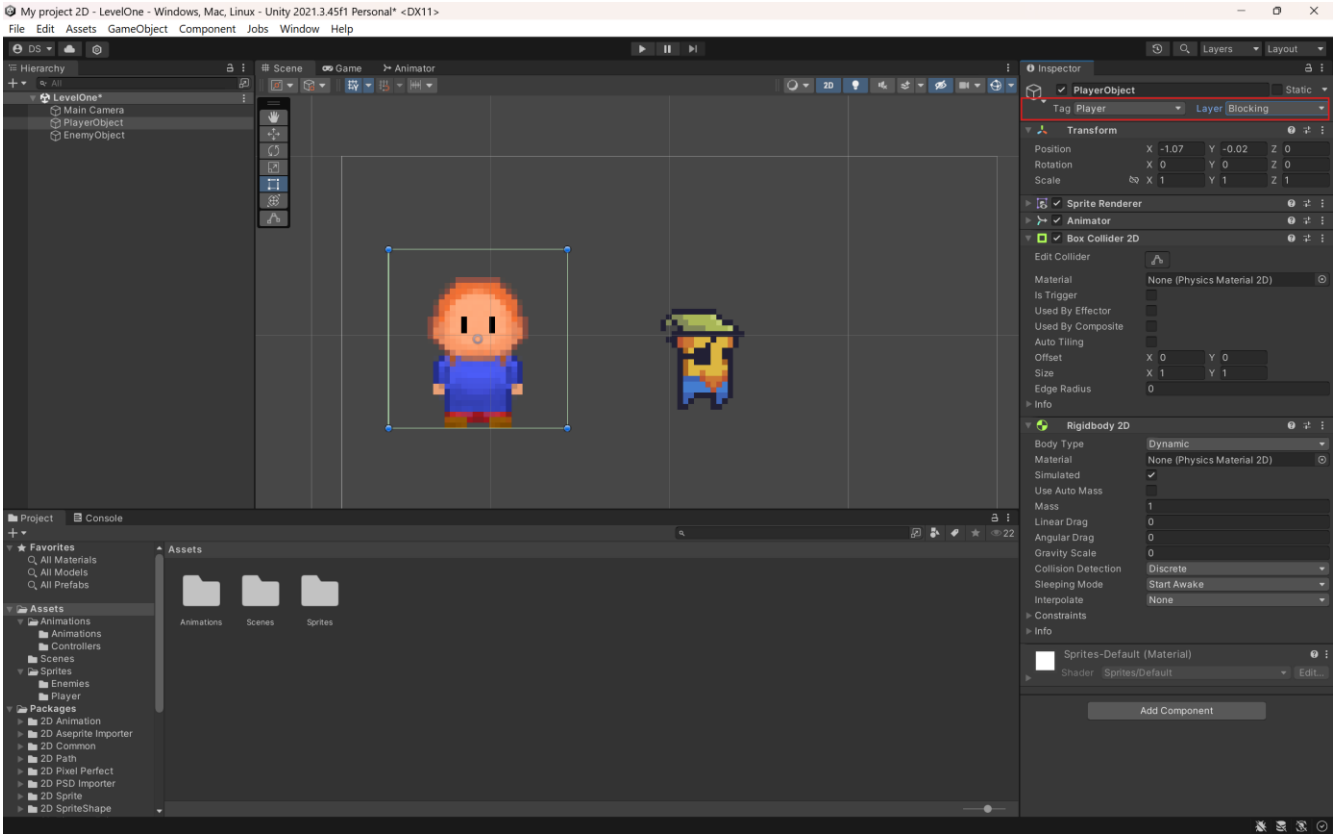

Project Settings
Adaptive Performance
Audio
Burst AOT Settings
Editor
Graphics
Input Manager
Memory Settings
Package Manager
Physics
Physics 2D
Player
Preset Manager
Quality
Physics 2D
Gravity
X 0
Y 0
Default Material
None (Physics Materia
Velocity Iterations
8
Position Iterations
3
Velocity Threshold
1
Max Linear Correction
0.2
Max Angular Correction
8
Max Translation Speed
100
Max Rotation Speed
360

Etiquetas & Capas





Capas


My project 2D - LevelOne - Windows, Mac, Linux - Unity 2021.3.45f1 Personal* <DX11>
File Edit Assets GameObject Component Jobs Window Help
Hierarchy
LevelOne*
Main Camera
PlayerObject
EnemyObject
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Is Trigger
Used By Effector
Used By Composite
Auto Tiling
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Body Type
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Use Auto Mass
Mass
Linear Drag
Angular Drag
Gravity Scale
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Sprites-Default (Material)
Shader
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2D Common
2D Path
2D Pixel Perfect
2D PSD Importer
2D Sprite
2D SpriteShape
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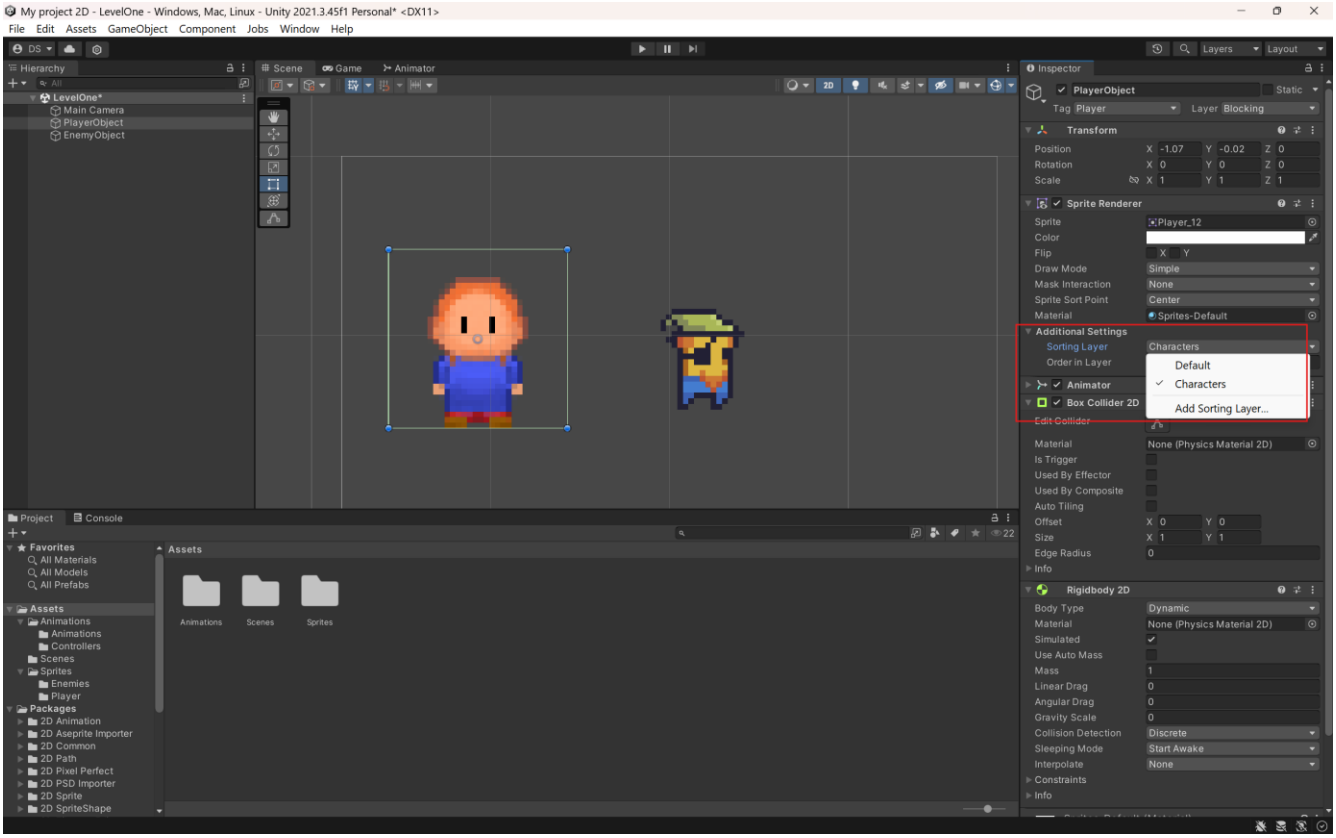
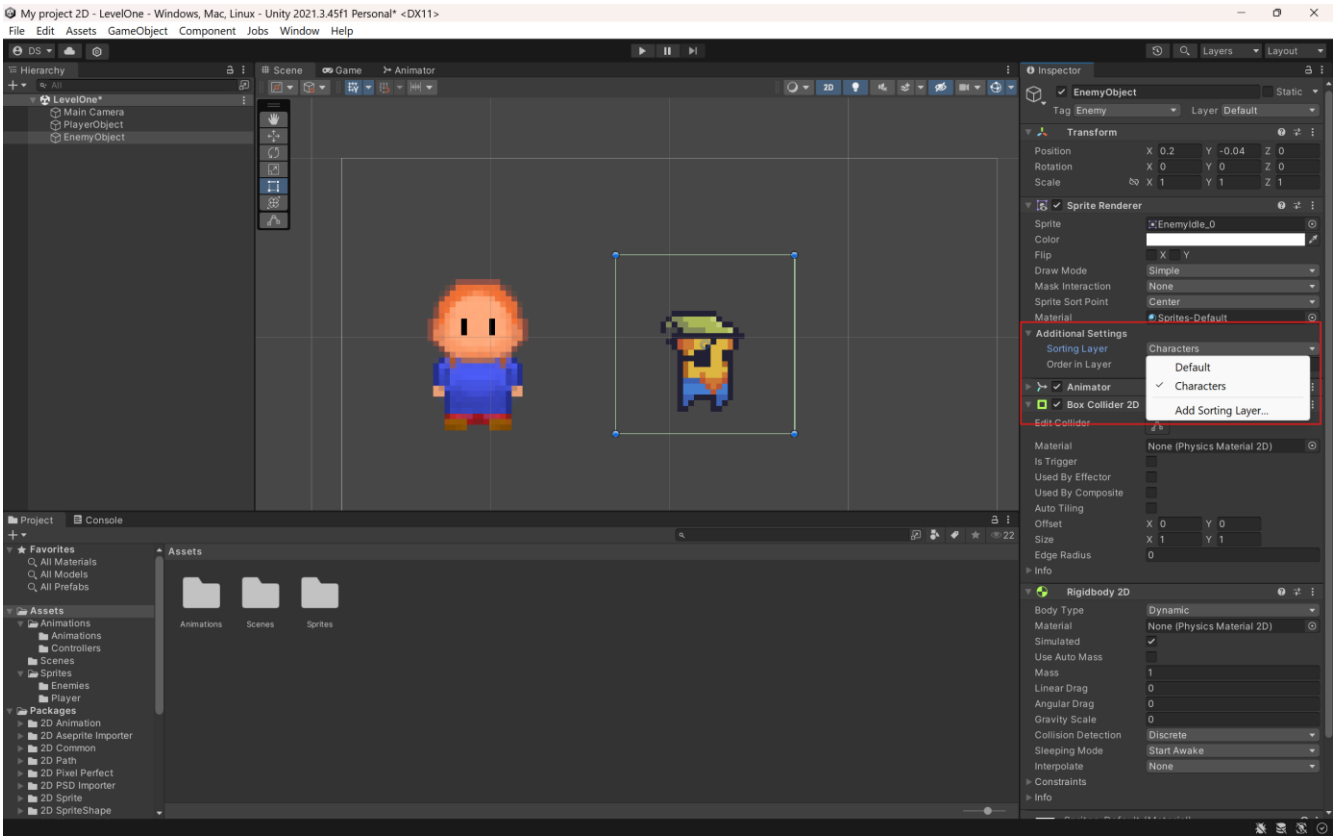
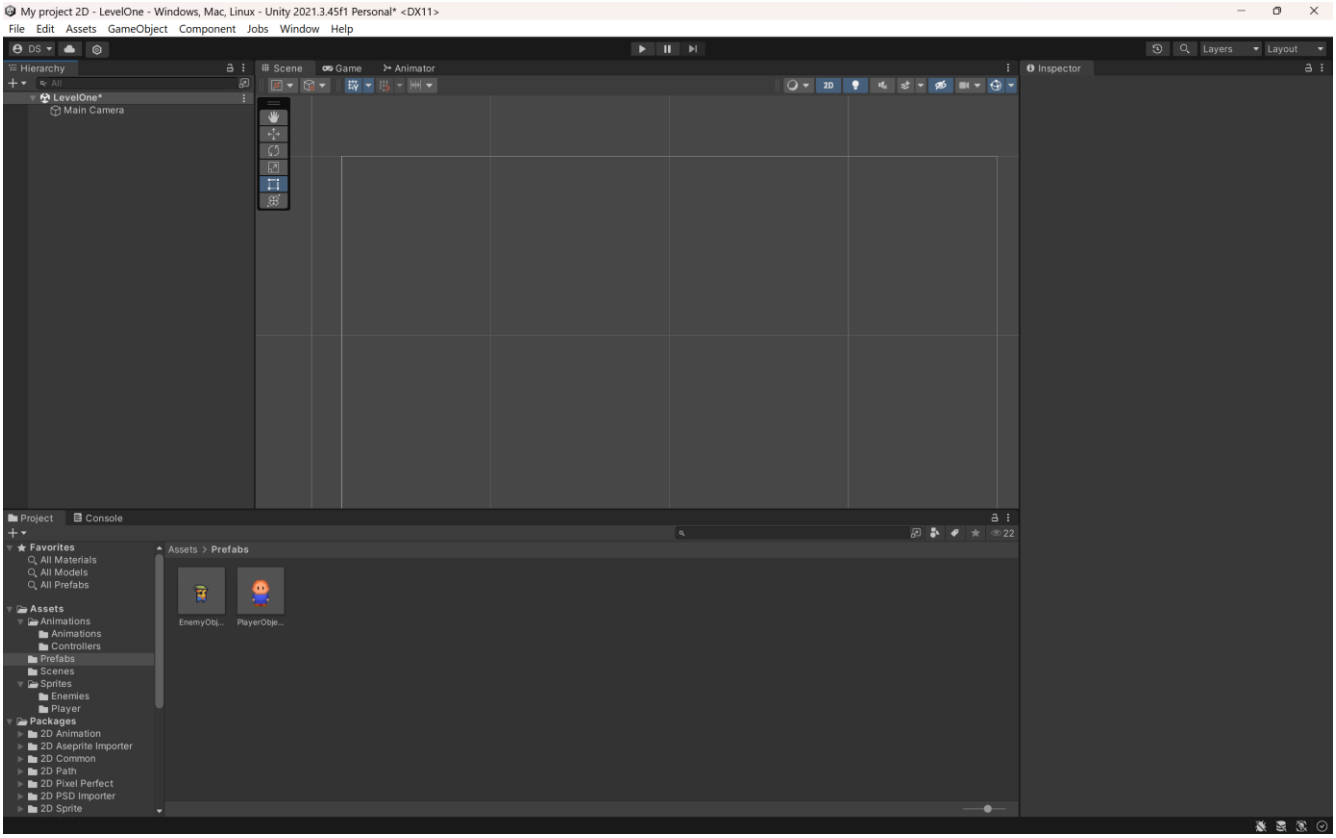
Sprites

Sorting layers





Prefabs


My project 2D - LevelOne - Windows, Mac, Linux - Unity 2021.3.45f1 Personal* <DX11>
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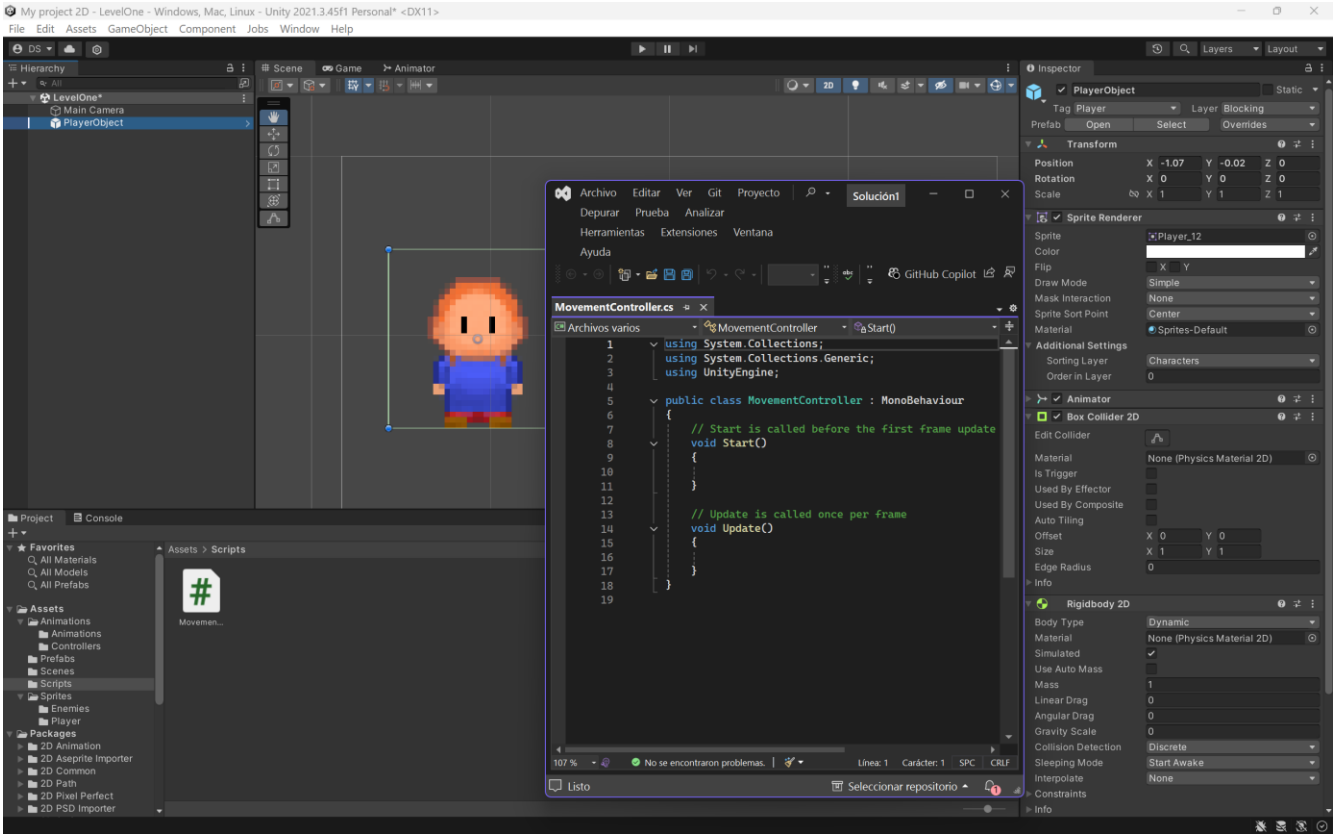
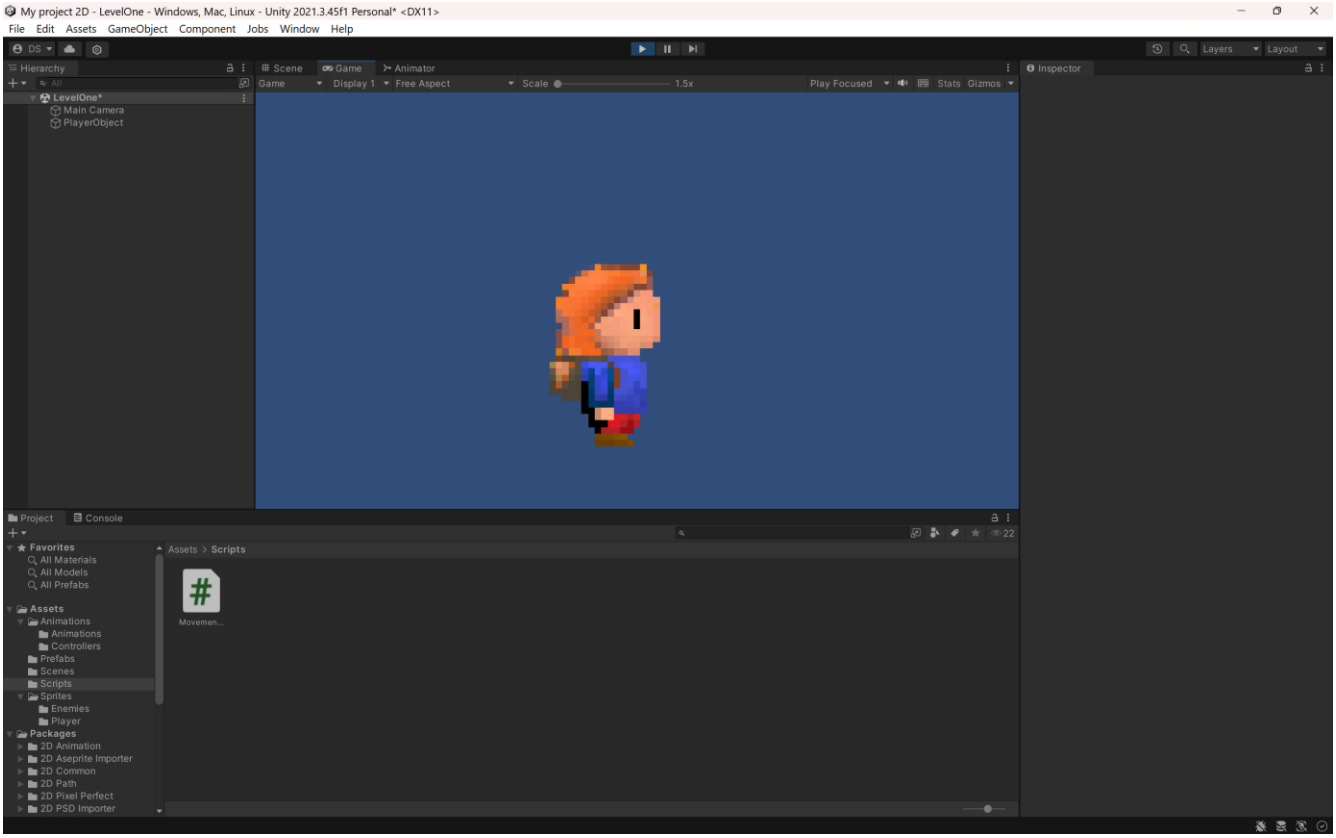
2D Animation
2D Aseprite Importer
2D Common
2D Path
2D Pixel Perfect
2D PSD Importer
2D Sprite
Assets > Prefabs
EnemyObj...
PlayerObje...

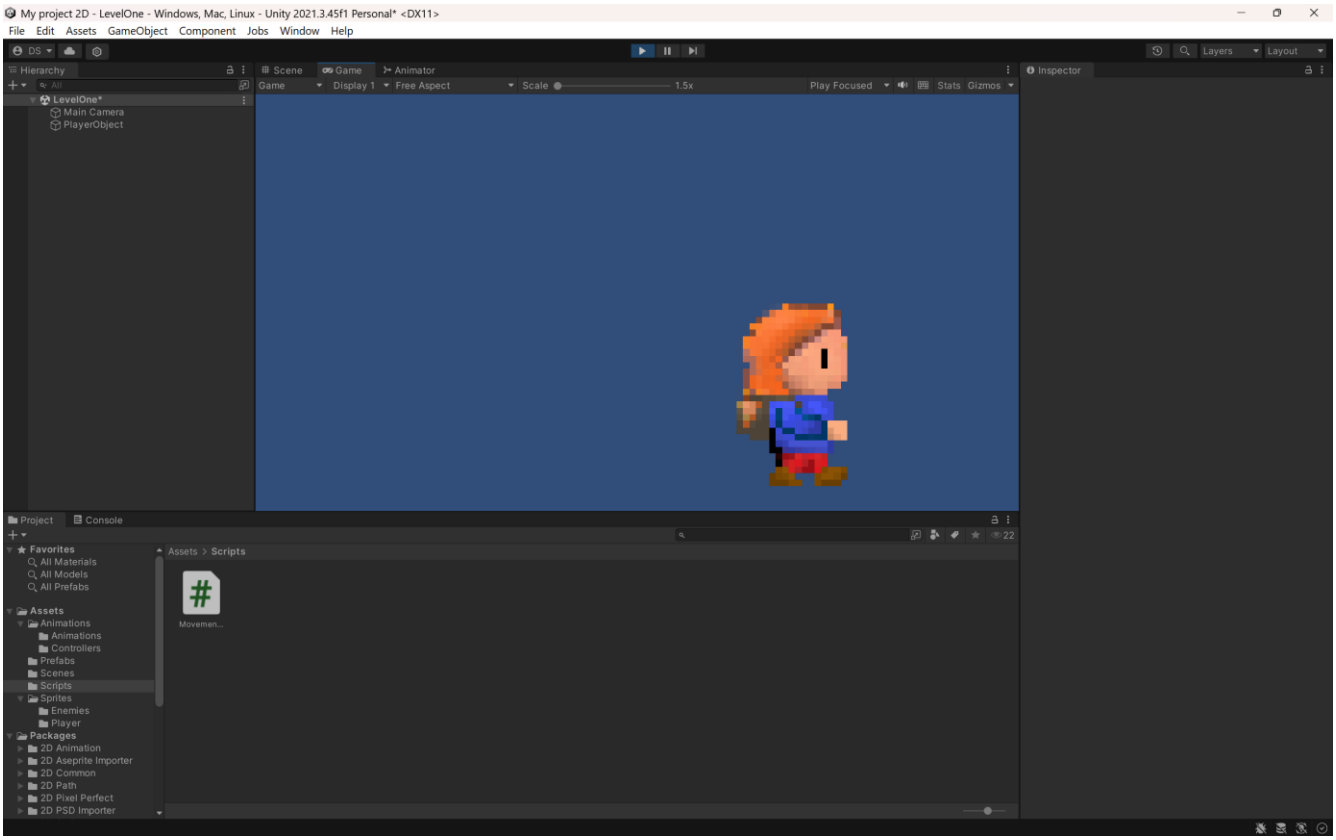
Scripts: Lógica para componentes



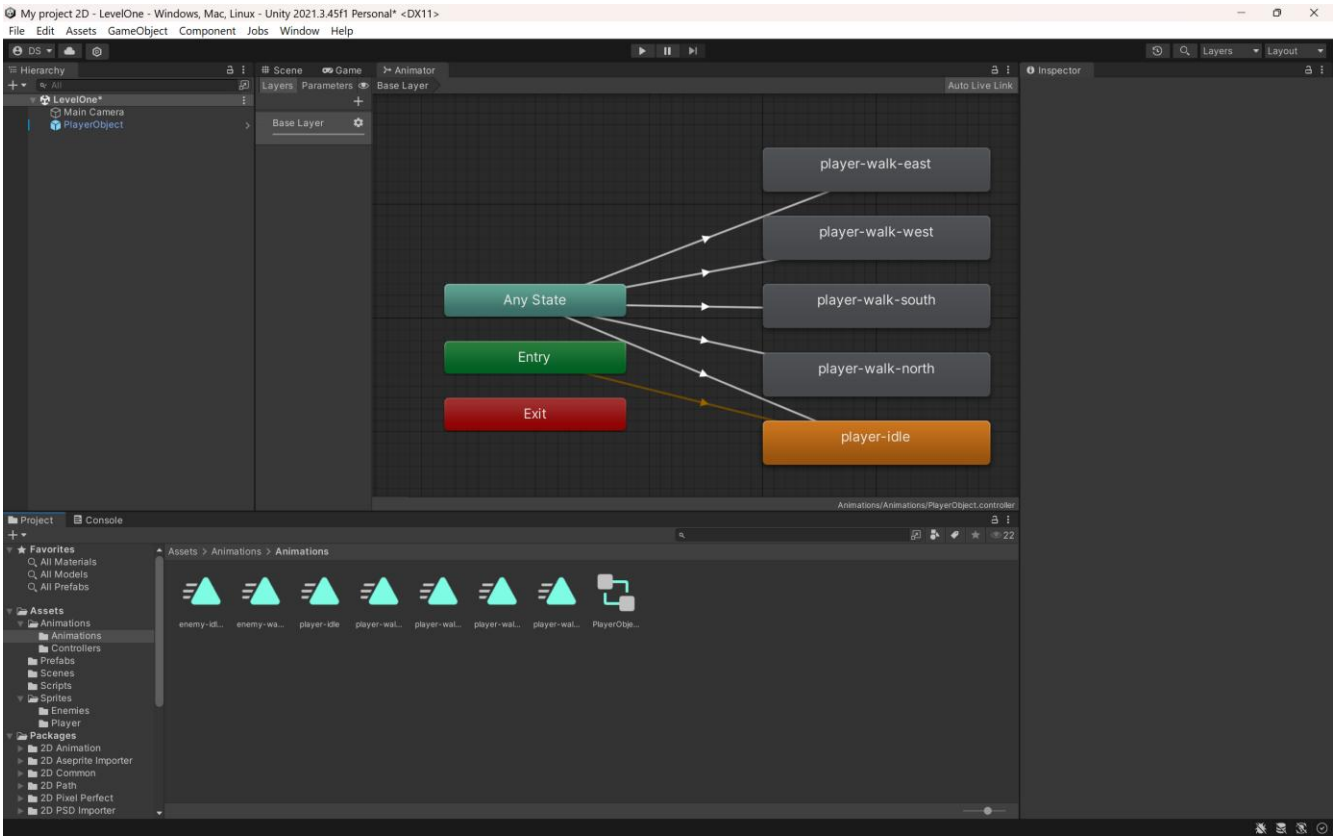
```
MovementController.cs
Archivos varios | MovementController | FixedUpdate()

1   using System.Collections;
2   using System.Collections.Generic;
3   using UnityEngine;
4
5   public class MovementController : MonoBehaviour
6   {
7       // Velocidad de los personajes
8       public float movementSpeed = 3.0f;
9       // Representa la ubicación del Player o Enemy
10      Vector2 movement = new Vector2();
11      // Referencia a RigidBody2D
12      Rigidbody2D rb2D;
13
14      // Start is called before the first frame update
15      void Start()
16      {
17          rb2D = GetComponent<Rigidbody2D>();
18      }
19
20      // Update is called once per frame
21      void Update()
22      {
23
24      }
25
26      private void FixedUpdate()
27      {
28          //Captura los datos de entrada
29          movement.x = Input.GetAxisRaw("Horizontal");
30          movement.y = Input.GetAxisRaw("Vertical");
31
32          //Conserva el rango de velocidad
33          movement.Normalize();
34          rb2D.velocity = movement * movementSpeed;
35      }
36  }
```

El personaje se mueve con las teclas WASD

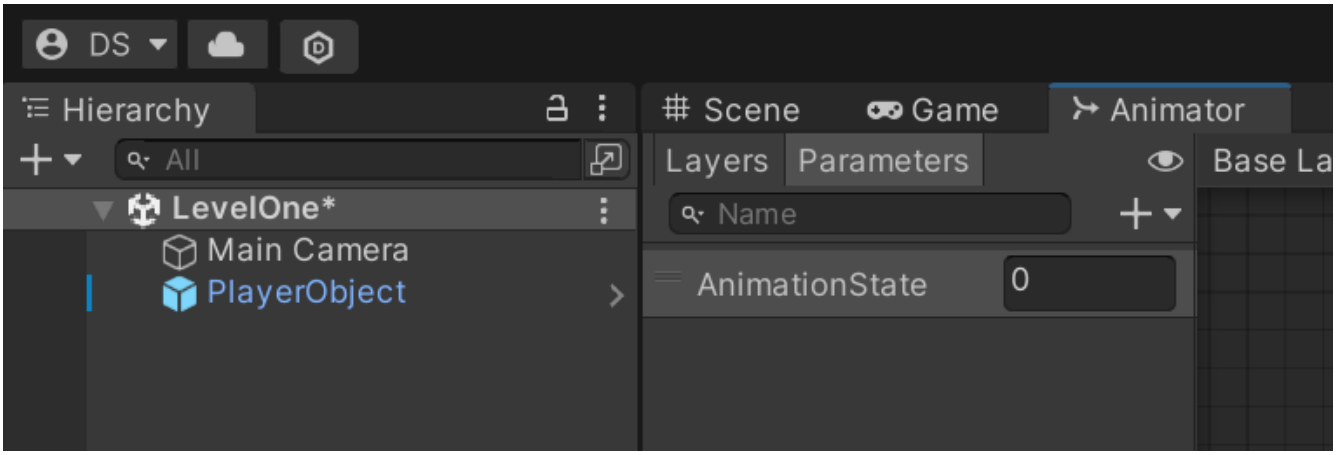


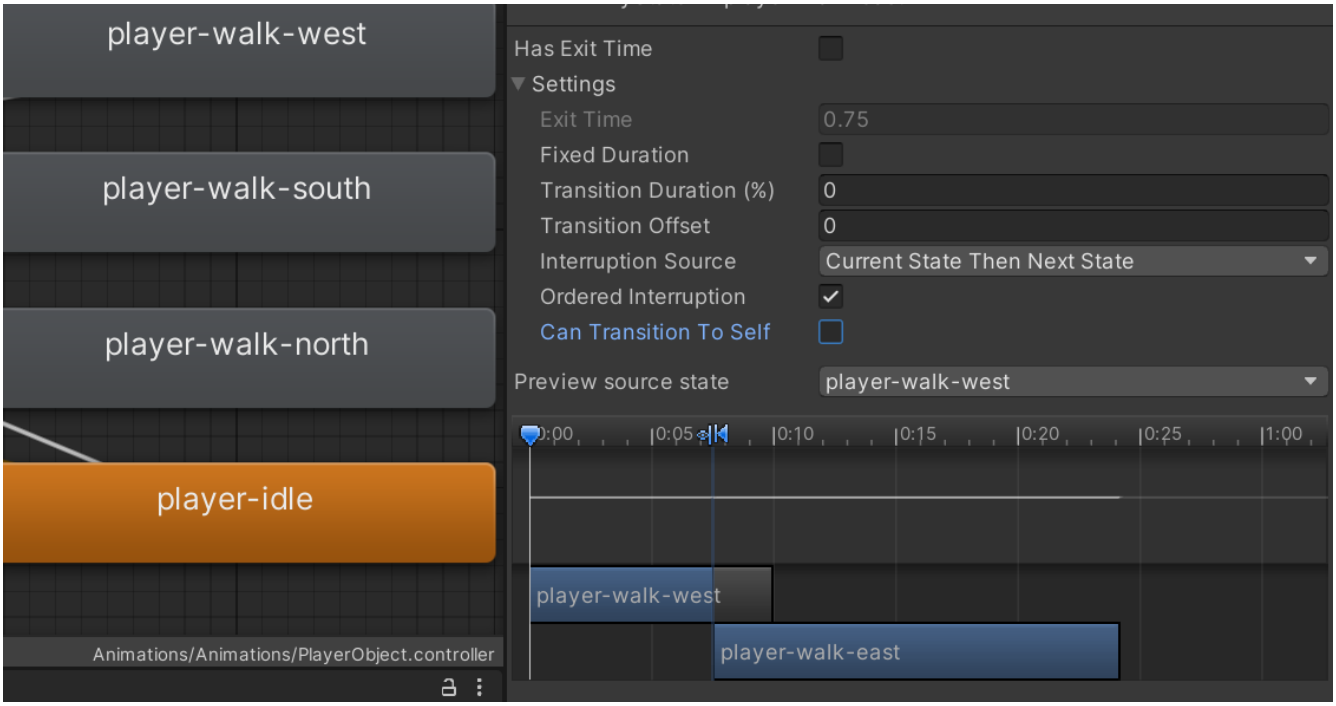


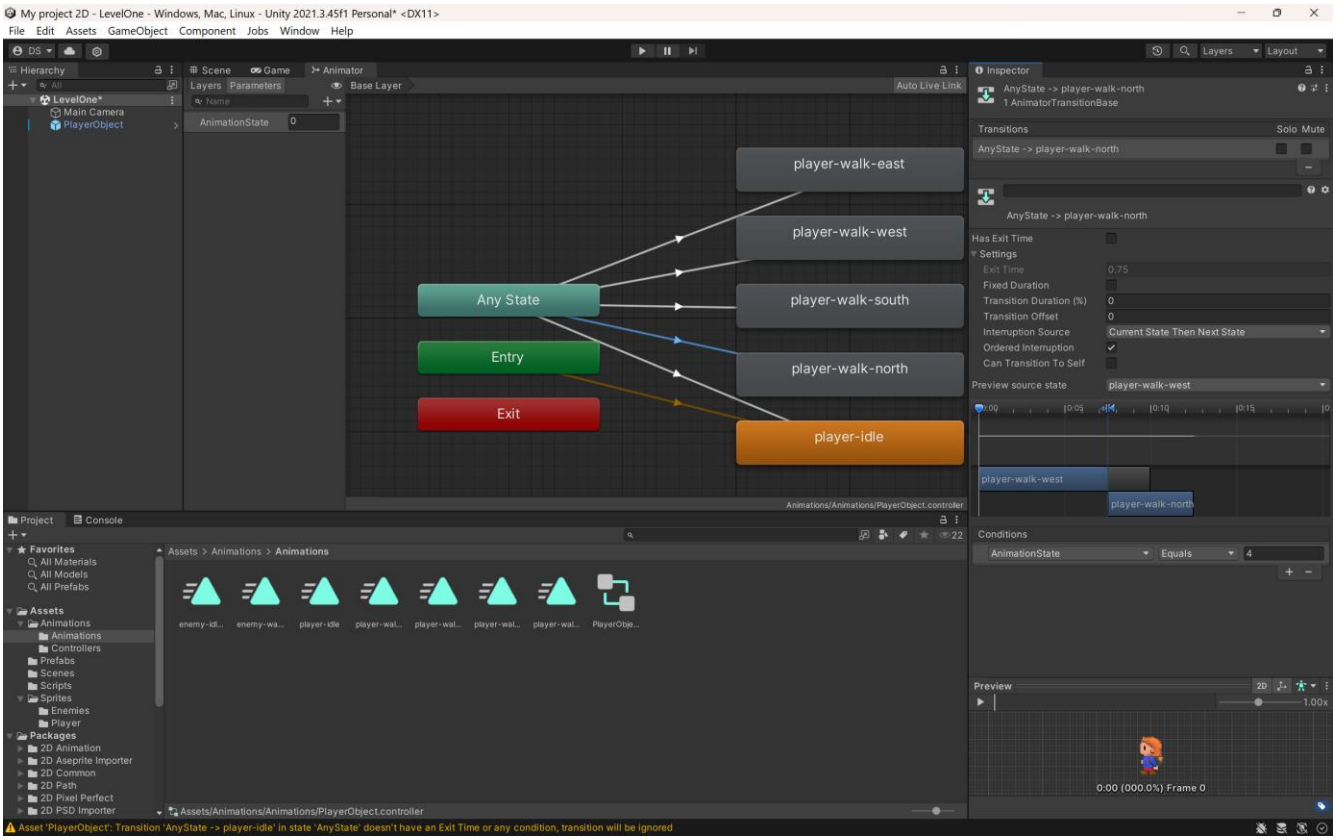
Estados y Animaciones



Parámetros de estado de Animación




player-walk-west
player-walk-south
player-walk-north
player-idle
Has Exit Time
Settings
Exit Time
0.75
Fixed Duration
Transition Duration (%)
0
Transition Offset
0
Interruption Source
Current State Then Next State
Ordered Interruption
Can Transition To Self
Preview source state
player-walk-west
0:00
0:05
0:10
0:15
0:20
0:25
1:00
player-walk-west
player-walk-east
Animations/Animations/PlayerObject.controller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Auto Live Link
Any State
Entry
Exit
player-walk-east
player-walk-west
player-walk-south
player-walk-north
player-idle
Inspector
AnyState -> player-walk-north
Transitions
Has Exit Time
Settings
Fixed Duration
Transition Duration (%)
Transition Offset
Interruption Source
Current State Then Next State
Ordered Interruption
Can Transition To Self
Preview source state
Conditions
AnimationState
Equals
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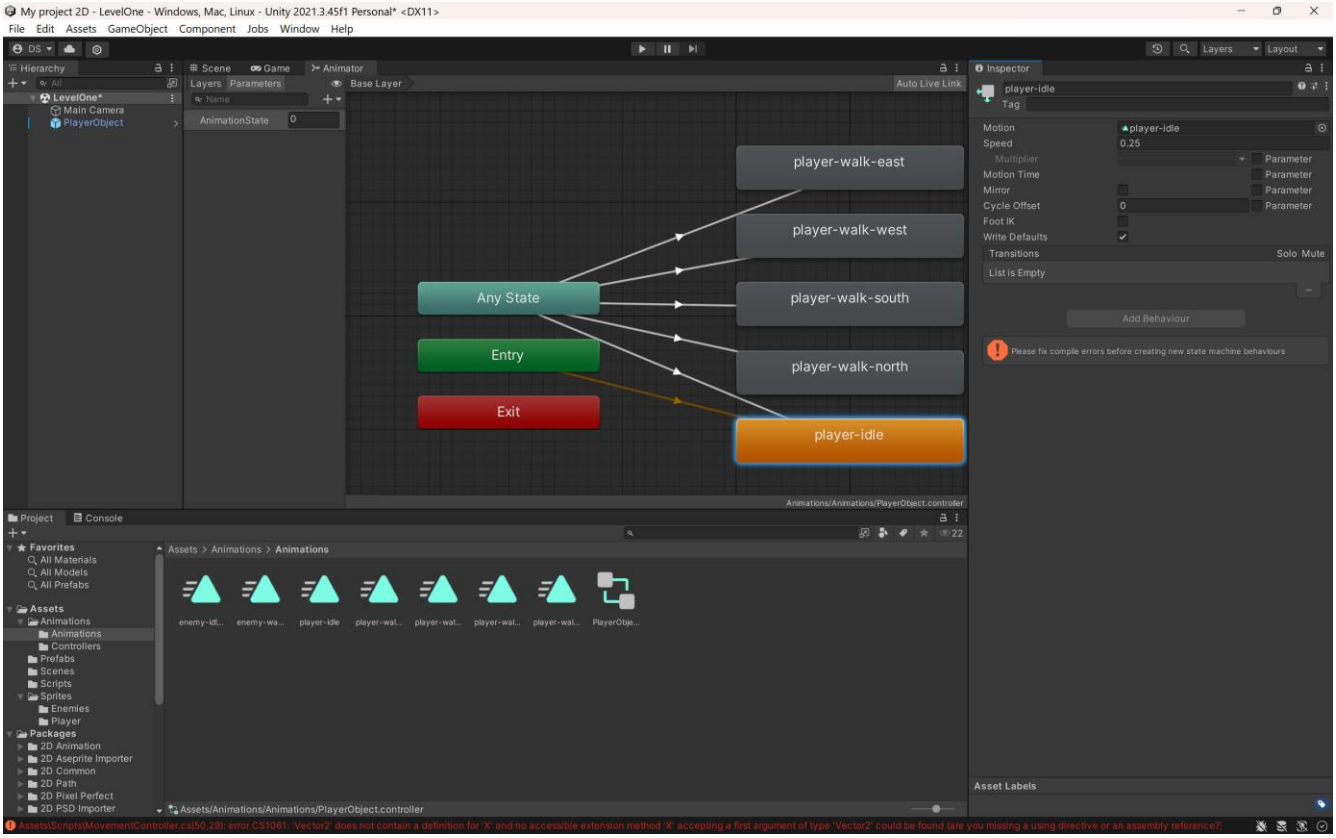
Preview
0:00 (000.0%) Frame 0
Asset 'PlayerObject': Transition 'AnyState -> player-idle' in state 'AnyState' doesn't have an Exit Time or any condition, transition will be ignored

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class MovementController : MonoBehaviour
{
    // Velocidad de los personajes
    public float movementSpeed = 3.0f;
    // Representa la ubicación del Player o Enemy
    Vector2 movement = new Vector2();
    // Referencia a RigidBody2D
    Rigidbody2D rb2D;

    Animator animator; //Referencia a componente animator
    string animationState = "AnimationState"; //Variable en Animator
    //Enumeración de los estados
    enum CharStates
    {
        walkEast = 1,
        walkSouth = 2,
        walkWest = 3,
        walkNorth = 4,
        idleSouth = 5,

    }

    // Start is called before the first frame update
    void Start()
    {
        //Establece el componente Rigidbody2D enlazado
        rb2D = GetComponent<Rigidbody2D>();
        //Establece valor de componente Animator el objeto ligado
        animator = GetComponent<Animator>();
    }

    // Update is called once per frame
    void Update()
    {
        this.UpdateState(); //Invoca al método
    }

    /* Método que define la definición a ejecutar en base al movimiento realizado por
     *  el usuario.
     */
    private void UpdateState()
    {
        if (movement.x > 0) //ESTE
        {
            animator.SetInteger(animationState, (int)CharStates.walkEast);
        } else if (movement.X < 0) //OESTE
        {
            animator.SetInteger(animationState, (int)CharStates.walkWest);
        } else if (movement.y > 0) //NORTE
        {
            animator.SetInteger(animationState, (int)CharStates.walkNorth);
        } else if (movement.y < 0) //SUR
        {
            animator.SetInteger(animationState, (int)CharStates.walkSouth);
        }
    }

    private void FixedUpdate()
    {
        MoveCharacter(); //Métodо definidp para ingresar la dirección
    }

    private void MoveCharacter()
    {
        //Captura los datos de entrada
        movement.x = Input.GetAxisRaw("Horizontal");
        movement.y = Input.GetAxisRaw("Vertical");

        //Conserva el rango de velocidad
        movement.Normalize();
        rb2D.velocity = movement * movementSpeed;
    }
}
```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Entry
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player-walk-east
player-walk-west
player-walk-south
player-walk-north
player-idle
Inspector
player-idle
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Motion
Speed
0.25
Multiplier
Motion Time
Mirror
Cycle Offset
Foot IK
Write Defaults
Transitions
Solo Mute
List is Empty
Add Behaviour
Please fix compile errors before creating new state machine behaviours
Project
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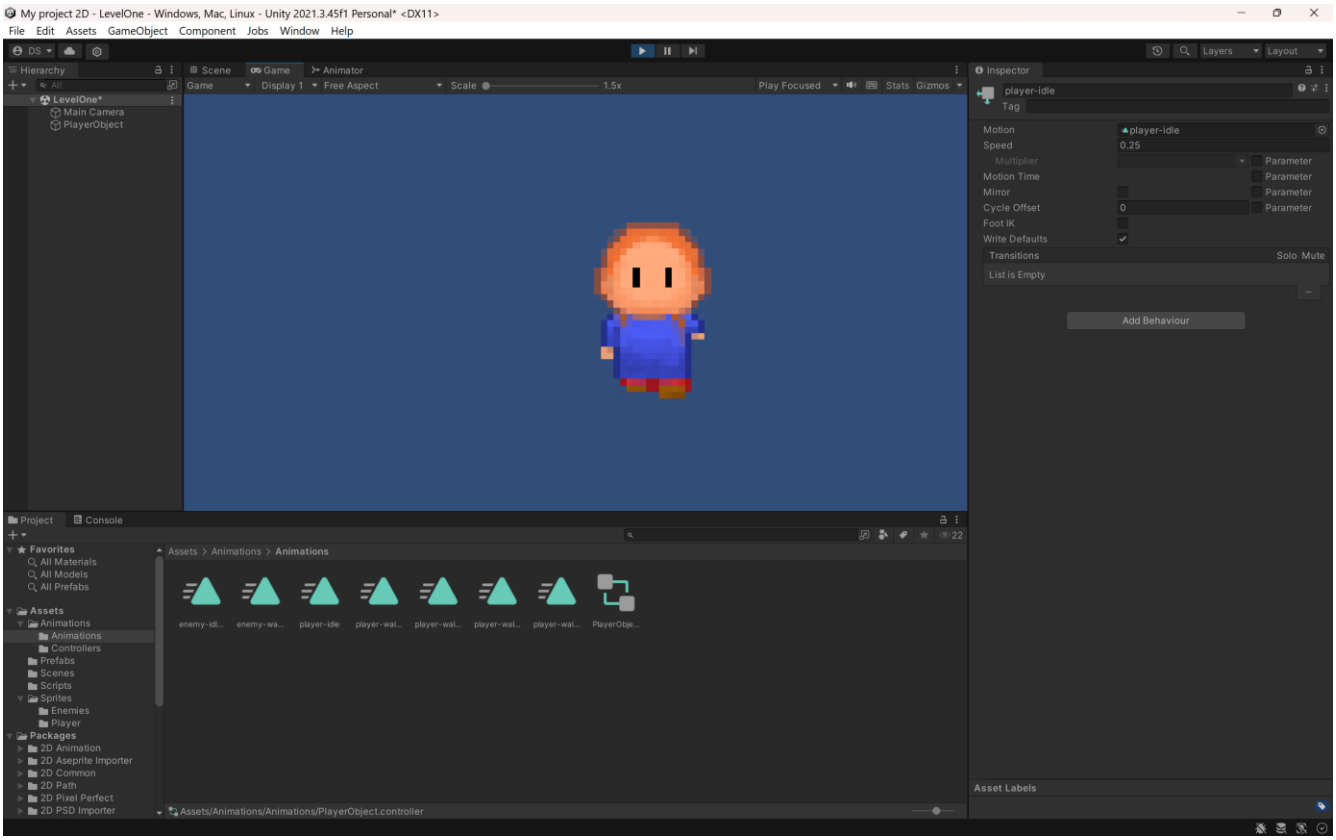
2D PSD Importer
Asset Labels


My project 2D - LevelOne - Windows, Mac, Linux - Unity 2021.3.45f1 Personal* <DX11>
File Edit Assets GameObject Component Jobs Window Help
Hierarchy
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Display 1
Free Aspect
Scale
1.5x
Play Focused
Stats
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player-idle
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