

**Tutoriales**

Tutorial 25 ..... 2

Tutorial 26 ..... 8

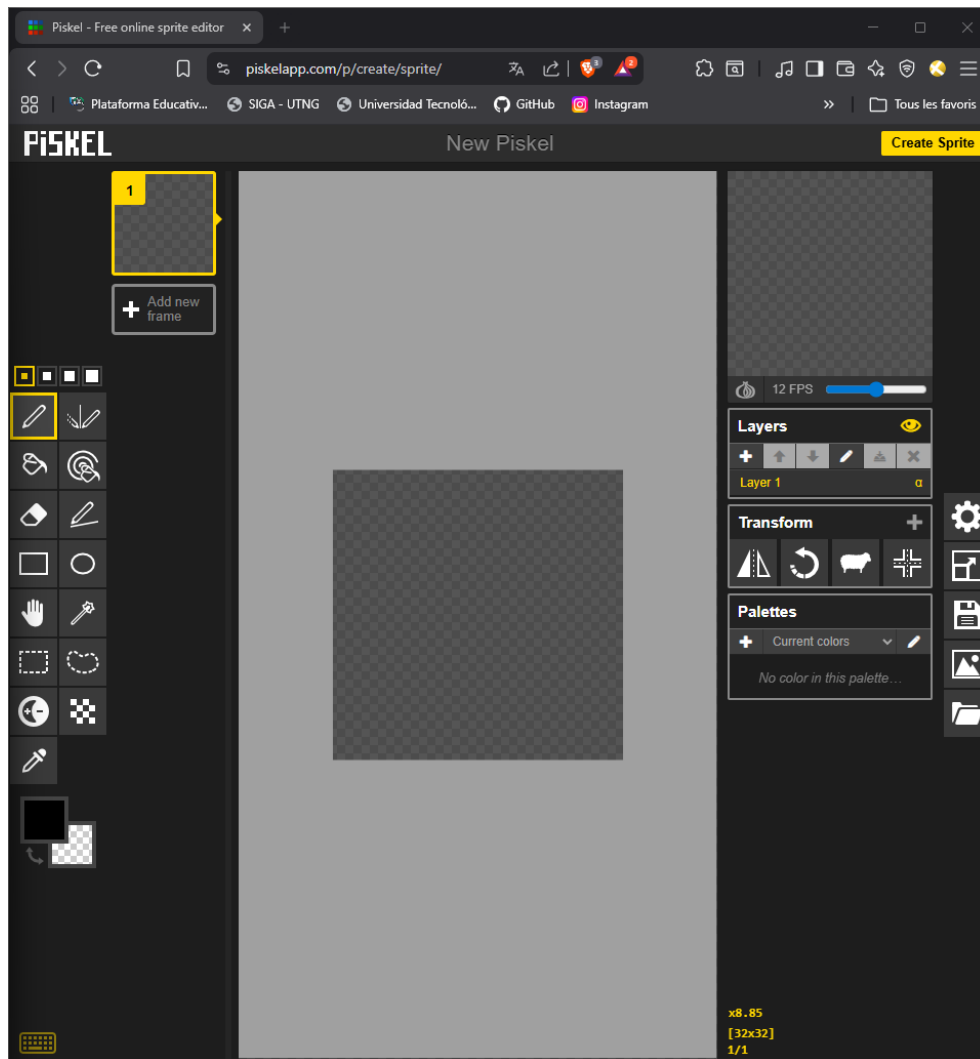
Tutorial 27 .....11

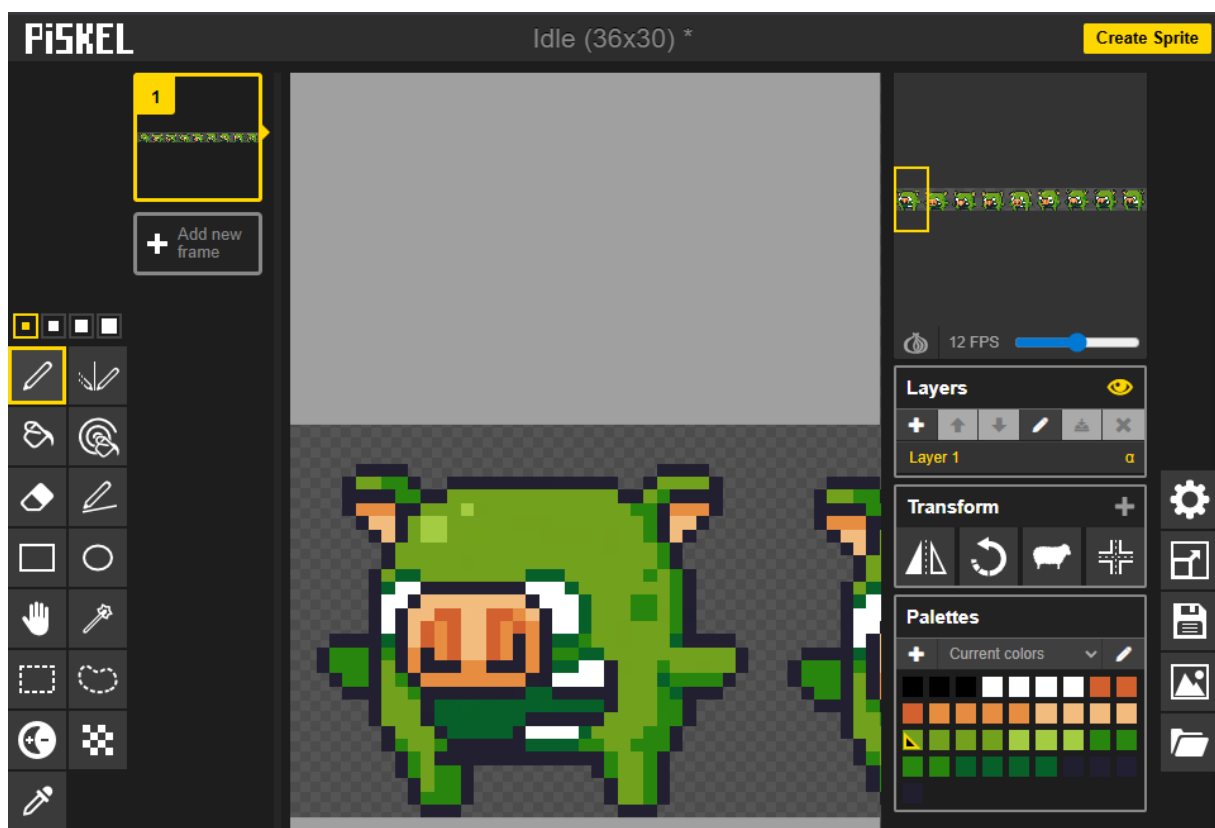
Tutorial 28 .....17

Tutorial 29 .....19

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## Tutorial 25



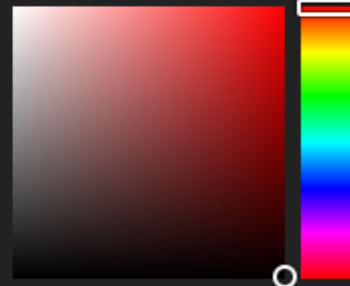


## Create Palette

X

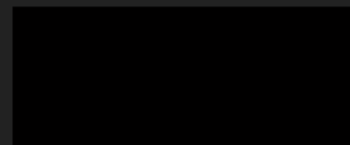
Name **Current colors clone**

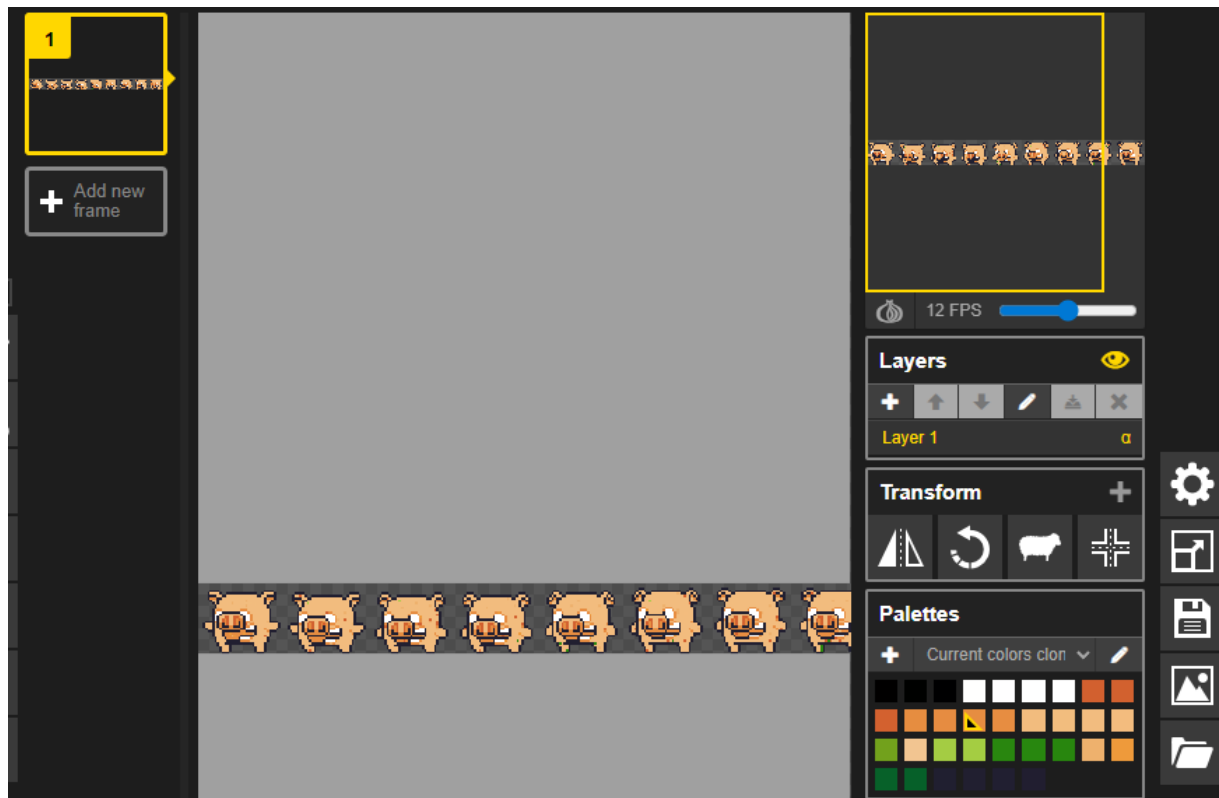
Import from file

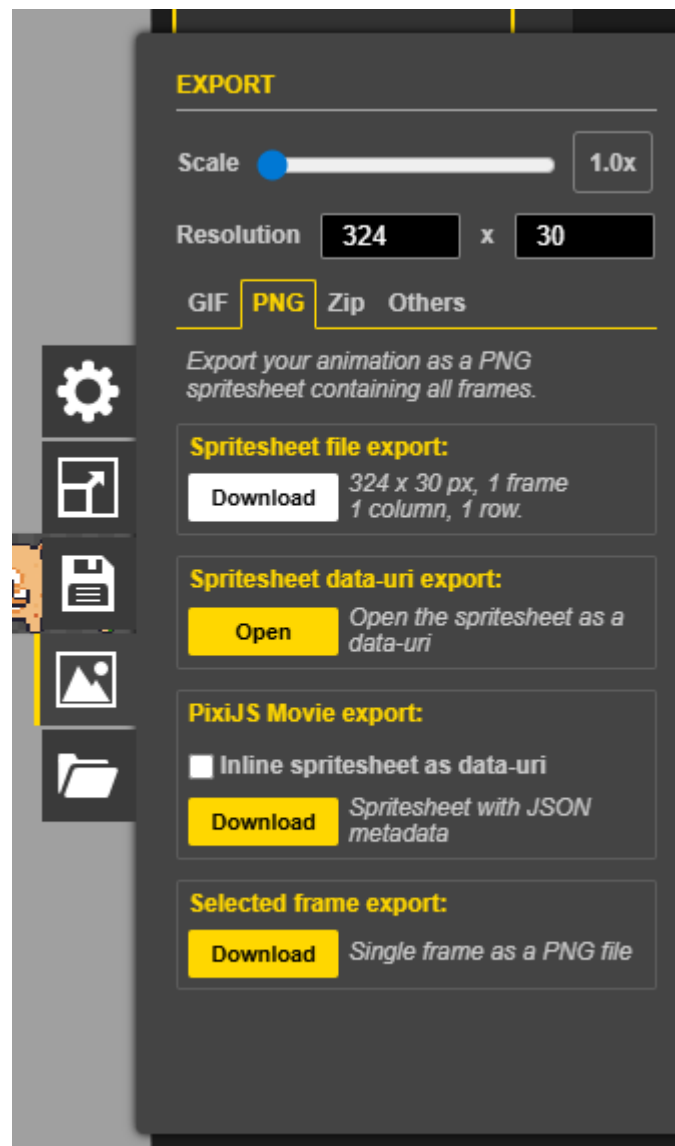


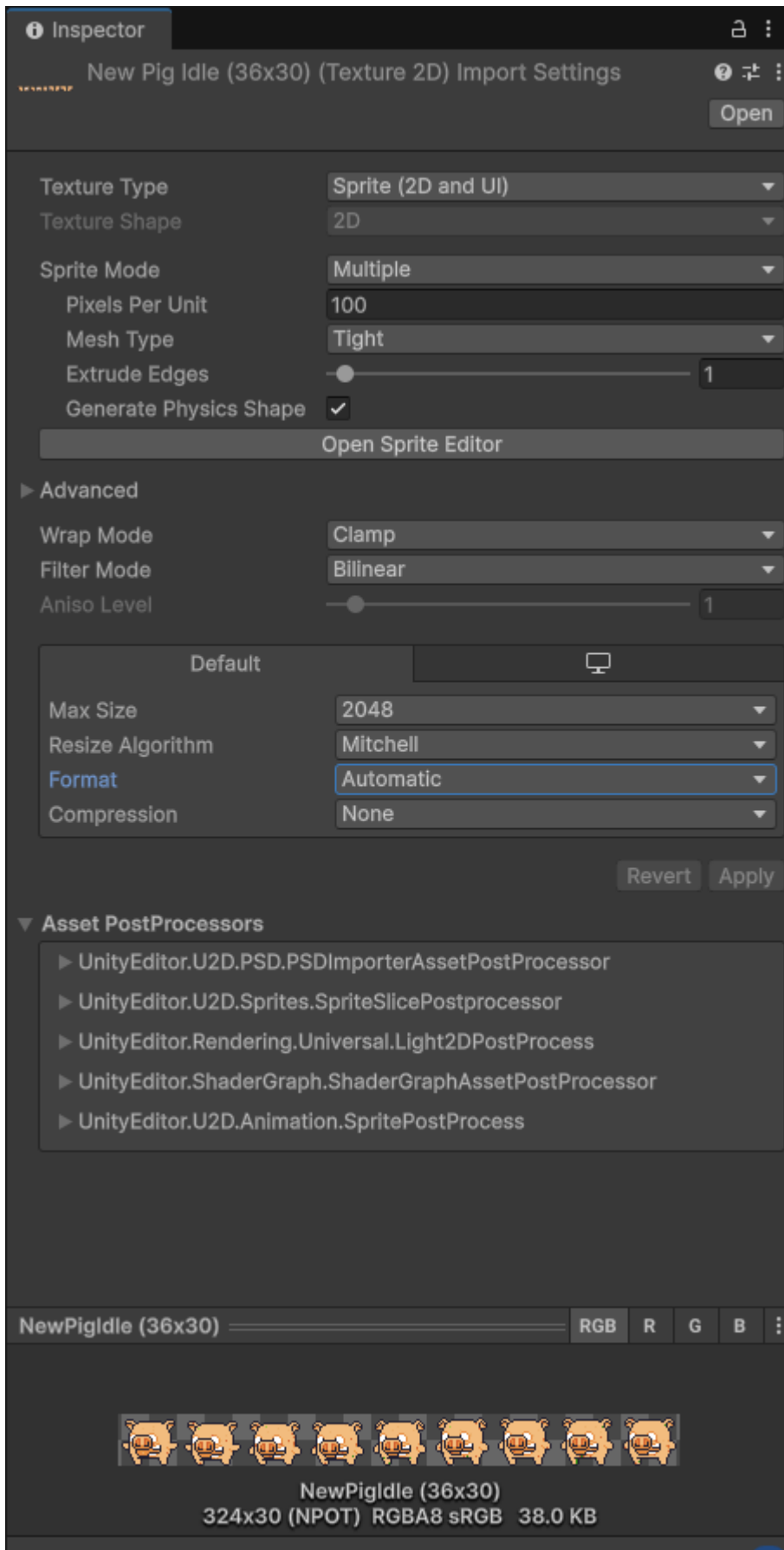
#010000

H  0  
S  100  
V  0  
R  1  
G  0  
B  0

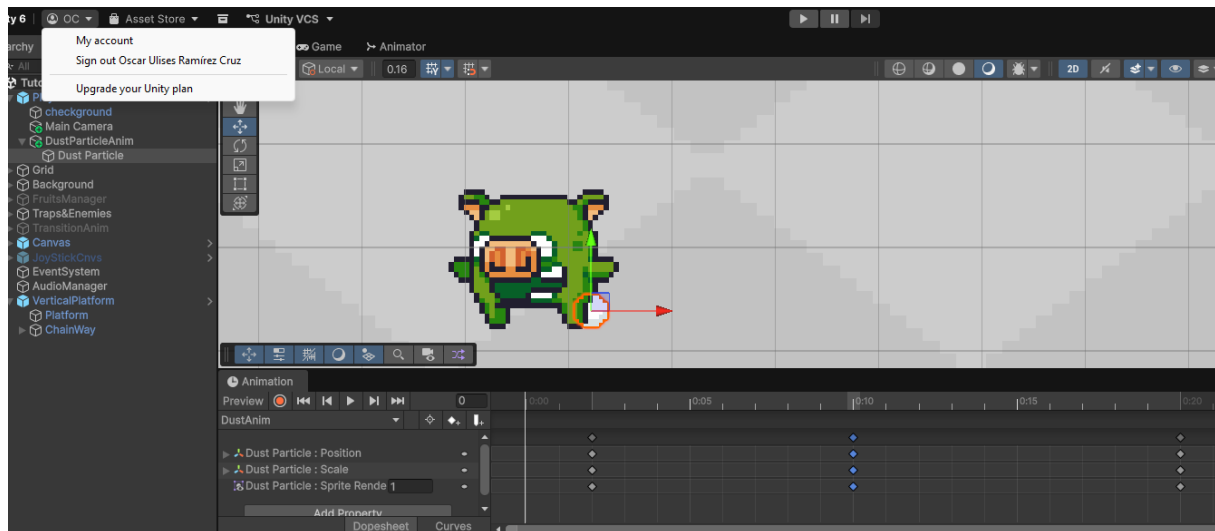
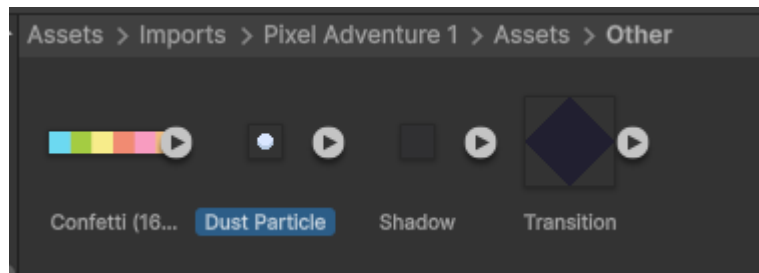








## Tutorial 26



```
0 références | Message Unity
void Update()
{
    float moveInput = Input.GetAxis("Horizontal");
    rb.linearVelocity = new Vector2(moveInput * moveSpeed, rb.linearVelocityY);

    if (moveInput > 0) {
        //sprRnd.flipX = true;
        transform.localScale = new Vector3(-0.8f, 0.8f, 1);
        anim.SetBool("Run", true);
    }
    else if (moveInput < 0)
    {
        //sprRnd.flipX = false;
        transform.localScale = new Vector3(0.8f, 0.8f, 1);
        anim.SetBool("Run", true);
    }
    else
    {
        anim.SetBool("Run", false);
    }
}
```

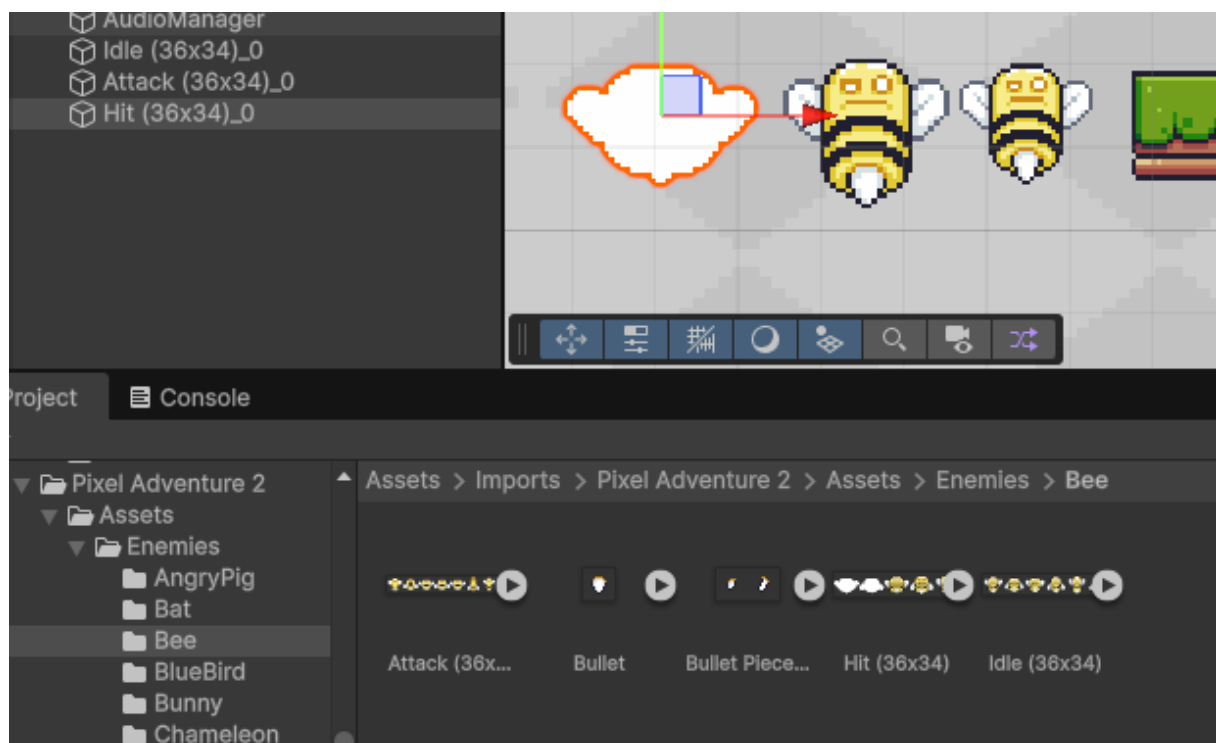


```
if (moveInput > 0) {  
    //sprRnd.flipX = true;  
    transform.localScale = new Vector3(-0.8f, 0.8f, 1);  
    anim.SetBool("Run", true);  
    if (CheckGround.isGrounded) dustAnimation.SetActive(true);  
}  
else if (moveInput < 0)  
{  
    //sprRnd.flipX = false;  
    transform.localScale = new Vector3(0.8f, 0.8f, 1);  
    anim.SetBool("Run", true);  
    if (CheckGround.isGrounded) dustAnimation.SetActive(true);  
}  
else  
{  
    anim.SetBool("Run", false);  
    dustAnimation.SetActive(false);  
}
```

Assets > Scripts > Player > PlayerJoystick.cs > PlayerJoystick > dustAnimation

```
4 public class PlayerJoystick : MonoBehaviour
18 public SpriteRenderer sprRnd;
    11 références | Champ Unity sérialisé
19 public Animator anim;
20
    3 références | Champ Unity sérialisé
21 public GameObject dustAnimation;
22
    0 références | Message Unity
23 void Start()
24 {
25     rb = GetComponent<Rigidbody2D>();
26 }
27
    0 références | Message Unity
28 void Update()
29 {
30     horizontalmove = joystick.Horizontal * moveSpeedHorizontal;
31     transform.position += new Vector3(horizontalmove, 0, 0) * Time.deltaTime * moveSpeed;
32
33     float moveInput = Input.GetAxis("Horizontal");
34     //rb.linearVelocity = new Vector2(moveInput * moveSpeed, rb.linearVelocityY);
35
36     if (horizontalmove > 0) {
37         transform.localScale = new Vector3(-0.8f, 0.8f, 1);
38         anim.SetBool("Run", true);
39         if (CheckGround.isGrounded) dustAnimation.SetActive(true);
40     }
41     else if (horizontalmove < 0)
42     {
43         //sprRnd.flipX = false;
44         transform.localScale = new Vector3(0.8f, 0.8f, 1);
45         anim.SetBool("Run", true);
46         if (CheckGround.isGrounded) dustAnimation.SetActive(true);
47     }
48     else
49     {
50         anim.SetBool("Run", false);
51         dustAnimation.SetActive(false);
52     }
53 }
```

## Tutorial 27



Inspector

BeeShooter

Static

Tag Untagged

Layer Default

Transform

Position

X0Y0Z0

Rotation

X0Y0Z0

Scale

X1Y1Z1

Sprite Renderer

Animator

Box Collider 2D

Edit Collider

MaterialNone (Physics Material 2D)

Is Trigger

Used By Effector

Auto Tiling

Composite OperationNone

Offset

X0.00249058Y0.1225445

Size

X0.2254999Y0.0191924

Edge Radius0

Layer Overrides

Layer Override Priority0

Include LayersNothing

Exclude LayersNothing

Force Send LayersEverything

Force Receive LayersEverything

Contact Capture LayersEverything

Callback LayersEverything

Info

Jump Damage (Script)

ScriptJumpDamage

Col 2dBeeShooter (Box Collider 2D)

AnimBeeShooter (Animator)

Sprite RendererBeeShooter (Sprite Renderer)

Destroy EffectParticle

Bounce Force2.5

Lives2

Sprite-Lit-Default (Material)

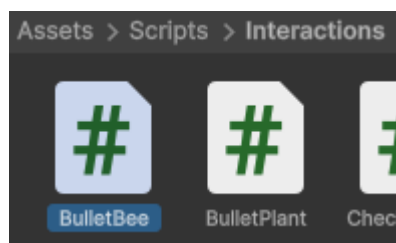
ShaderUniversal Render Pipeline/2D/Sprite-Lit-I

Edit...

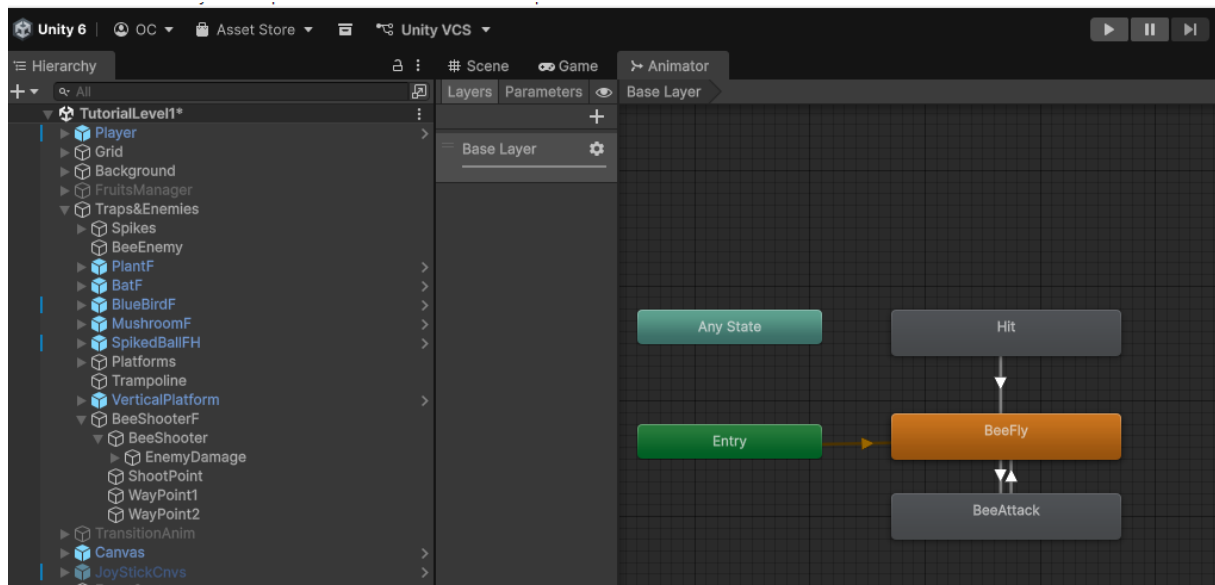
Add Component



```
Assets > Scripts > Enemies > C# EnemyBee.cs > EnemyBee
3 public class EnemyBee : MonoBehaviour
4 {
5     0 références | Champ Unity sérialisé
6     public SpriteRenderer spriteRenderer;
7     1 référence | Champ Unity sérialisé
8     public float speed = 0.5f;
9     4 références
10    private float waitTime;
11    5 références | Champ Unity sérialisé
12    public Transform[] moveSpots;
13    2 références | Champ Unity sérialisé
14    public float startWaitTime = 2f;
15    6 références
16    private int direction = 0;
17    0 références
18    private Vector2 currentPosition;
19
20    0 références | Message Unity
21    void Start()
22    {
23        waitTime = startWaitTime;
24    }
25
26    0 références | Message Unity
27    void Update()
28    {
29        if (moveSpots.Length == 0 || moveSpots[direction] == null) return;
30
31        transform.position = Vector2.MoveTowards(transform.position, moveSpots[direction].position, speed * Time.deltaTime);
32
33        if (Vector2.Distance(transform.position, moveSpots[direction].position) < 0.1f)
34        {
35            if (waitTime <= 0)
36            {
37                if (direction < moveSpots.Length - 1)
38                {
39                    direction++;
40                }
41                else
42                {
43                    direction = 0;
44                }
45                waitTime = startWaitTime;
46            }
47            else
48            {
49                waitTime -= Time.deltaTime;
50            }
51        }
52    }
53 }
```



```
Assets > Scripts > Interactions > C# BulletBee.cs > BulletBee > Update
1  using UnityEngine;
2
3  0 références | Script Unity
4  public class BulletBee : MonoBehaviour
5  {
6      1 référence | Champ Unity sérialisé
7      public float speed = 2f;
8      1 référence | Champ Unity sérialisé
9      public float lifeTime = 2f;
10
11      0 références | Message Unity
12      private void Start()
13      {
14          Destroy(gameObject, lifeTime);
15      }
16
17      0 références | Message Unity
18      private void Update()
19      {
20          transform.Translate(Vector2.down * speed * Time.deltaTime);
21      }
22  }
```



Assets > Scripts > Enemies > BeeAttack.cs > BeeAttack

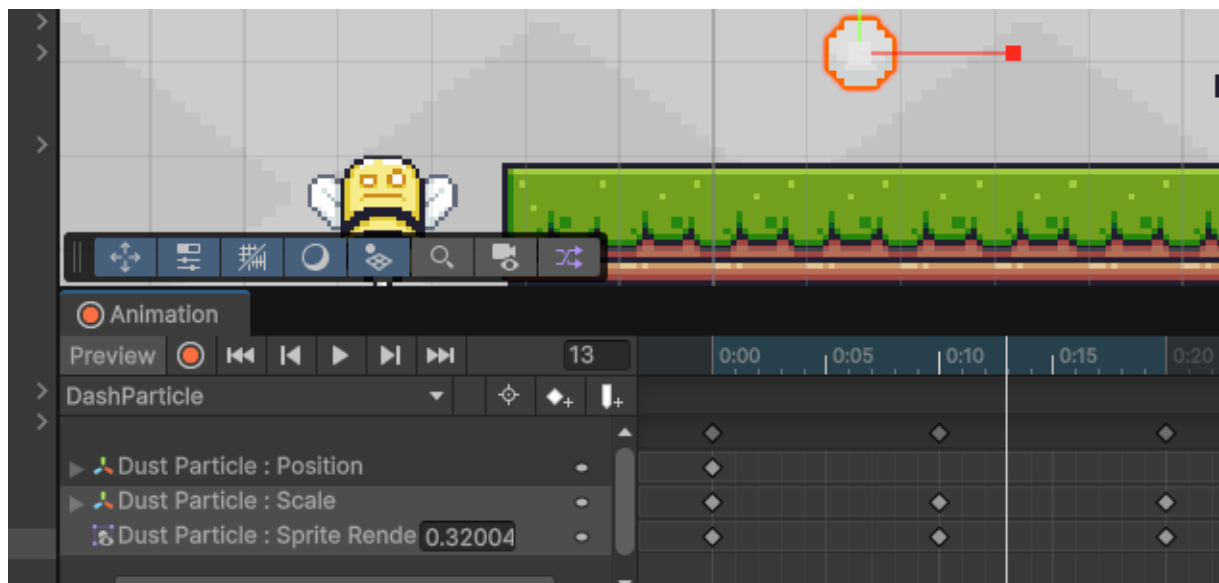
```
1 using UnityEngine;
2
3 0 références | Script Unity
4 public class BeeAttack : MonoBehaviour
5 {
6     1 référence | Champ Unity sérialisé
7     public Animator anim;
8     1 référence | Champ Unity sérialisé
9     public float distRaycast = 0.5f;
10    1 référence
11    private float cooldownAttack = 1.5f;
12    4 références
13    private float currentCooldownAttack;
14    1 référence | Champ Unity sérialisé
15    public GameObject bullet;
16
17 0 références | Message Unity
18 private void Start()
19 {
20     currentCooldownAttack = 0;
21 }
22
23 0 références | Message Unity
24 private void Update()
25 {
26     currentCooldownAttack -= Time.deltaTime;
27 }
28
29 0 références
30 private void FixedUpdate()
31 {
32     RaycastHit2D hit = Physics2D.Raycast(transform.position, Vector2.down, distRaycast);
33
34     if (hit.collider != null && hit.collider.CompareTag("Player") && currentCooldownAttack <= 0)
35     {
36         anim.Play("BeeAttack");
37         Invoke("ShootBullet", 0.5f);
38         currentCooldownAttack = cooldownAttack;
39     }
40 }
41
42 0 références
43 public void ShootBullet()
44 {
45     GameObject newBullet = Instantiate(bullet, transform.position, transform.rotation);
46 }
47 }
48
```

Assets > Scripts > Enemies > BeeAttack.cs > BeeAttack > FixedUpdate

```
3 public class BeeAttack : MonoBehaviour
4 {
5     2 références | Champ Unity sérialisé
6     public float distRaycast = 0.5f;
7     1 référence
8     private float cooldownAttack = 1.5f;
9     4 références
10    private float currentCooldownAttack;
11    1 référence | Champ Unity sérialisé
12    public GameObject bullet;
13
14    0 références | Message Unity
15    private void Start()
16    {
17        currentCooldownAttack = 0;
18    }
19
20    0 références | Message Unity
21    private void Update()
22    {
23        currentCooldownAttack -= Time.deltaTime;
24
25        Debug.DrawRay(transform.position, Vector2.down * distRaycast, Color.red);
26    }
27
28    0 références | Message Unity
29    private void FixedUpdate()
30    {
31        RaycastHit2D hit = Physics2D.Raycast(transform.position, Vector2.down, distRaycast);
32
33        if (hit.collider != null && hit.collider.CompareTag("Player") && currentCooldownAttack <= 0)
34        {
35            anim.Play("BeeAttack");
36            Invoke("ShootBullet", 0.5f);
37            currentCooldownAttack = cooldownAttack;
38        }
39    }
40
41    0 références
42    public void ShootBullet()
43    {
44        GameObject newBullet = Instantiate(bullet, transform.position, transform.rotation);
45    }
46 }
```



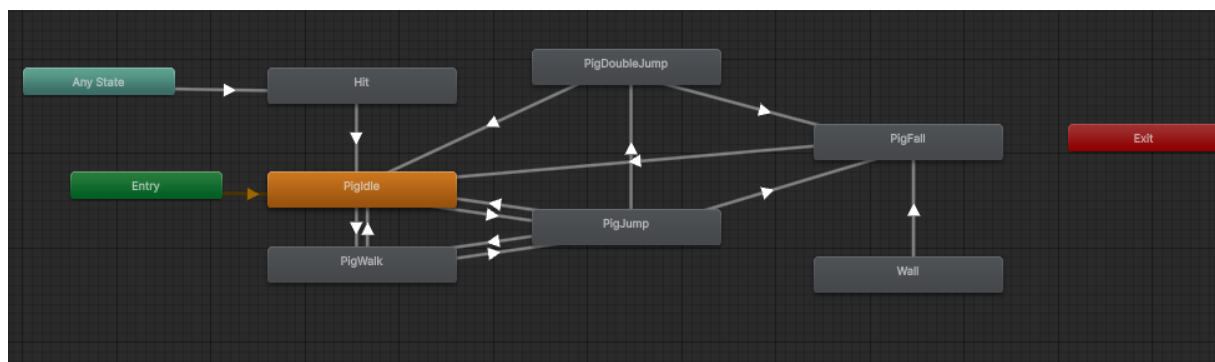
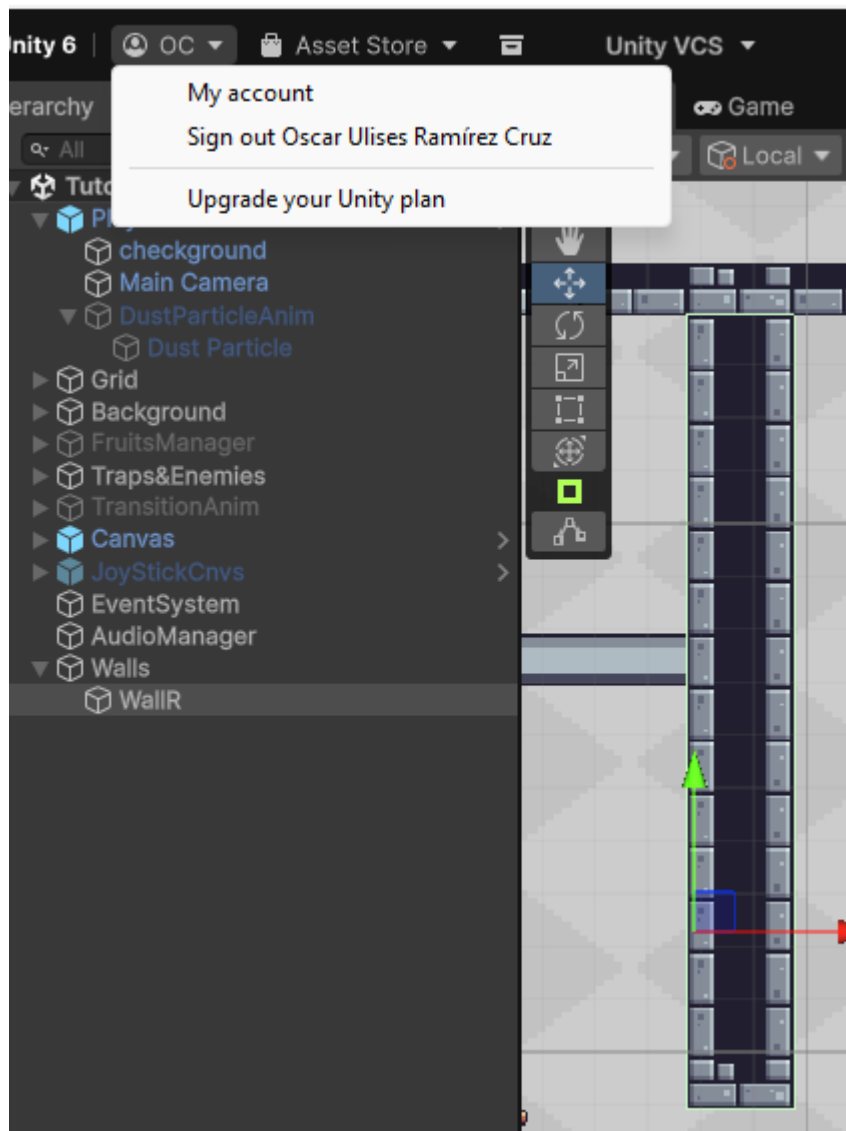
## Tutorial 28



Assets > Scripts > Player > PlayerMove.cs > PlayerMove > Dash

```
6 public class PlayerMove : MonoBehaviour
31
32 0 références | Message Unity
32 void Update()
33 {
34     dashCooldown -= Time.deltaTime;
35
36     float moveInput = Input.GetAxis("Horizontal");
37     rb.linearVelocity = new Vector2(moveInput * moveSpeed, rb.linearVelocityY);
38
39     if (moveInput > 0) { ...
45     else if (moveInput < 0) ...
52     else ...
57
58     if (Input.GetKey(KeyCode.Space)) ...
77
78     if (Input.GetKeyDown(KeyCode.LeftShift) && dashCooldown <= 0)
79     {
80         Dash();
81     }
82
83     if (CheckGround.isGrounded) ...
89     else ...
95
96     if (rb.linearVelocityY < 0) ...
100 } else if (rb.linearVelocityY > 0) ...
104
105 if (betterJump) ...
116 }
117
118 1 référence
118 public void Dash()
119 {
120     GameObject dash = Instantiate(dashEffect, transform.position, transform.rotation);
121
122     if (transform.localScale.x > 0)
123     {
124         rb.AddForce(Vector2.left * dashSpeed, ForceMode2D.Impulse);
125     }
126     else
127     {
128         rb.AddForce(Vector2.right * dashSpeed, ForceMode2D.Impulse);
129     }
130
131     dashCooldown = 2;
132
133     Destroy(dash, 0.5f);
134 }
```

## Tutorial 29



Assets > Scripts > Player > C# PlayerMove.cs > PlayerMove > isTouching

```
6 public class PlayerMove : MonoBehaviour
26
    0 références
27 bool isTouchingFront = false;
    0 références
28 bool wallSliding = false;
29
    0 références | Champ Unity sérialisé
30 public float wallSlidingSpeed = 0.75f;
31
    0 références
32 bool isTouching;
```

```
if (moveInput > 0 && isTouching == false) {
    //sprRnd.flipX = true;
    transform.localScale = new Vector3(0.8f, 0.8f, 1);
    anim.SetBool("Run", true);
    if (CheckGround.isGrounded) dustAnimation.SetActive(true);

    if (Input.GetKeyDown(KeyCode.LeftShift) && dashCooldown <= 0) Dash();
}
else if (moveInput < 0 && isTouching == false)
{
    //sprRnd.flipX = false;
    transform.localScale = new Vector3(0.8f, 0.8f, 1);
    anim.SetBool("Run", true);
    if (CheckGround.isGrounded) dustAnimation.SetActive(true);

    if (Input.GetKeyDown(KeyCode.LeftShift) && dashCooldown <= 0) Dash();
}
else...

if (Input.GetKey(KeyCode.Space) && !wallSliding)
{
    if (CheckGround.isGrounded)
    {
        canDoubleJump = true;
        rb.linearVelocity = new Vector2(rb.linearVelocityX, jumpForce);
    } else
    {
        if (Input.GetKeyDown(KeyCode.Space))
        {
            if (canDoubleJump)
            {
                anim.SetBool("DoubleJump", true);
                rb.linearVelocity = new Vector2(rb.linearVelocityX, doubleJumpForce);
                canDoubleJump = false;
            }
        }
    }
}
}
```

```

if (isTouchingFront && !CheckGround.isGrounded)
{
    wallSliding = true;
}
else
{
    wallSliding = false;
}

if (wallSliding)
{
    anim.Play("Wall");
    rb.linearVelocity = new Vector2(rb.linearVelocityX, Mathf.Clamp(rb.linearVelocityY, -wallSlidingSpeed, float.MaxValue));
}

```

0 références | Message Unity

```

private void OnCollisionStay2D(Collision2D collision)
{
    if (collision.gameObject.CompareTag("wall"))
    {
        isTouchingFront = true;
        isTouching = true;
    }
}

```

0 références | Message Unity

```

private void OnCollisionExit2D(Collision2D collision)
{
    isTouchingFront = false;
    isTouching = false;
}

```

## Tutorial 30



Assets > Scripts > Player > C# PlayerRespawn.cs > PlayerRespawn > Start

```
6 public class PlayerRespawn : MonoBehaviour
14
15     0 références | Message Unity
16     void Start()
17     {
18         life = lifes.Length;
19         if (PlayerPrefs.GetFloat("chPntX") != 0 && PlayerPrefs.GetFloat("chPntY") != 0)
20         {
21             chPntX = PlayerPrefs.GetFloat("chPntX");
22             chPntY = PlayerPrefs.GetFloat("chPntY");
23
24             transform.position = new Vector2(chPntX, chPntY);
25         }
26
27     0 références | Message Unity
28     private void Update()
29     {
30         if (life < 1)
31         {
32             anim.Play("Hit");
33             Destroy(lifes[0]);
34             SceneManager.LoadScene(SceneManager.GetActiveScene().buildIndex);
35         }
36         else if (life < 2) {
37             anim.Play("Hit");
38             Destroy(lifes[1]);
39         }
40         else if (life < 3) {
41             anim.Play("Hit");
42             Destroy(lifes[2]);
43         }
44
45     1 référence
46     public void ReachedCheckPoint(float x, float y)
47     {
48         PlayerPrefs.SetFloat("chPntX", transform.position.x);
49         PlayerPrefs.SetFloat("chPntY", transform.position.y);
50     }
51
52     2 références
53     public void PlayerDamaged()
54     {
55         life--;
56     }
```

```
1 référence
27  ✓ private void CheckLifes()
28      {
29  ✓      if (life < 1)
30          {
31              anim.Play("Hit");
32              Destroy(lifes[0]);
33              SceneManager.LoadScene(SceneManager.GetActiveScene().buildIndex);
34          }
35  ✓      else if (life < 2) {
36          anim.Play("Hit");
37          Destroy(lifes[1]);
38      }
39  ✓      else if (life < 3) {
40          anim.Play("Hit");
41          Destroy(lifes[2]);
42      }
43  }
44
1 référence
45  ✓ public void ReachedCheckPoint(float x, float y)
46      {
47          PlayerPrefs.SetFloat("chPntX", transform.position.x);
48          PlayerPrefs.SetFloat("chPntY", transform.position.y);
49      }
50
2 références
51  ✓ public void PlayerDamaged()
52      {
53          life--;
54  ○      CheckLifes();
55      }
56  }
57
```



