4 behaviour tutorials

* PlayerMovement.

1. public class PlayerMovement : MonoBehaviour {
2. public CharacterController2D controller;
3. public float runSpeed = 40f; // player speed of the character.
4. float horizontalMove = 0f;
5. bool jump = false; //
7. // Update is called once per frame
8. void Update () {
9. horizontalMove = Input.GetAxisRaw("Horizontal") \* runSpeed; // by pressing A, D or arrow key to move the character.
10. if (Input.GetButtonDown("Jump")) // by pressing space key to make character jump.
11. {
12. jump = true;
13. }
14. }
15. private void FixedUpdate()
16. {
17. controller.Move(horizontalMove \* Time.fixedDeltaTime, false, jump); // multiplying with time.fixedDeltatime is going to ensure that we move the same amount no matter how often this function is called.
18. jump = false;
19. }
20. }

\*Time.fixedDeltaTime is the amount of time that elapsed since the last time this function was called.

* Weapon

public class Weapon : MonoBehaviour {

public Transform firePoint; // reference of firepoint.

public GameObject bulletPrefab; // reference of gameobject called bullet.

// Update is called once per frame

void Update () {

if (Input.GetButtonDown("Fire1")) //by pressing fire button(f key) allow the character to shoot.

{

Shoot();

}

}

void Shoot ()

{

Instantiate(bulletPrefab, firePoint.position, firePoint.rotation); // instantiate is for spawn an object, which is bulletprefab, next is the position and the rotation.

}

}

Enemy

public class Enemy : MonoBehaviour {

public int health = 100; // hp of the enemy which is 100

public GameObject deathEffect;

public void TakeDamage(int damage) // allow enemy to take damage form the bullet.

{

health -= damage;

if (health <= 0) // if the enemy hp gose blow zero then the enemy will die

{

Die();

}

}

void Die()

{

//Instantiate(deathEffect, transform.position, Quaternion.identity);

Destroy(gameObject); // enemy destroy when die.

}

}

Bullet

public class Bullet : MonoBehaviour {

public float speed = 20f; //speed of the bullet.

public int damage = 40; // damage of the bullet.

public Rigidbody2D rb; // rigidbody that controls the bullet.

// Use this for initialization

void Start () {

rb.velocity = transform.right \* speed; // give order to rigidbody to move bullet to right according to the speed.

}

private void OnTriggerEnter2D(Collider2D hitInfo)

{

Enemy enemy = hitInfo.GetComponent<Enemy>(); // give order to bullet to find where the enemy is.

if(enemy != null) // if found an enemy component on the object.

{

enemy.TakeDamage(damage);

Destroy(gameObject);

}

}

}

Source of the tutorial: <https://www.youtube.com/watch?v=wkKsl1Mfp5M&list=PLPV2KyIb3jR6TFcFuzI2bB7TMNIIBpKMQ&index=5>

https://www.youtube.com/watch?v=dwcT-Dch0bA&list=PLPV2KyIb3jR6TFcFuzI2bB7TMNIIBpKMQ&index=2

Learning journal

Before start the project, I’ve learned how to give order to make character walk, but while I am working on the tutorial I will have to know how to add more script in order to make character to do more stuff, such as shooting and destroy the enemy also start have some ideas how to create reference and variable by watching the tutorials on YouTube.

Programming log

I beginning my project by set up some simple sprite, such as player, bullet and enemy, the date I start it around 23-24 NOV and finish about one hours, it quite easy for me to create 3 sprites don’t have something that interrupt me. Next day which is 25.NOV I start my first tutorials called Playermovement and finish in 90 mins, it takes me some time to do some research, and put the weapon script into player sprite with playermovement at the same time. I start last 2 scripts on 29 and 30. NOV and it takes about 10 hours for me to finish, however, when I hit the play button and player fire the bullet but the enemy didn’t destroy, so I ask for help during the programming lesson.