

```
using UnityEngine;
using System.Collections;

// Monster class
public class CMonster : MonoBehaviour {

    // Monster State
    protected enum STATE { WALK, ATTACK, DIE }
    protected STATE monsterState = STATE.WALK;

    // Hit sound audio clip
    public AudioClip hitAudioClip;

    // Monster speed
    public float speed;

    protected Animator animator;
    protected SpriteRenderer spriteRenderer;

    // Player reference
    protected Transform player;

    // Monster hit count
    protected int hitCount = 0;
    // Monster hit effect position
    public Transform hitPoint;
    // Monster attack effect position
    public Transform attackHitPoint;
    // Monster hit effect prefab
    protected Object hitPrefab;
    // Monster attack hit effect prefab
    protected Object attackHitPrefab;

    void Awake()
    {
        animator = GetComponentInChildren<Animator>();
        spriteRenderer = GetComponentInChildren<SpriteRenderer>();

        hitPrefab = (Object)Resources.Load("Prefabs/Effects/Hit");
        attackHitPrefab = (Object)Resources.Load("Prefabs/Effects/AttackHit");
    }

    void Start () {
        InitMonster();
    }

    void Update () {
        OrderZIndex();
    }

    // Monster initialize
    public virtual void InitMonster()
    {
        player = GameObject.Find("Player").transform;

        StartMove();
    }
}
```

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}

// Monster move start
public void StartMove()
{
    Walk();
}

// Monster attack
public void Attack()
{
    monsterState = STATE.ATTACK;

    GetComponent<Rigidbody2D>().velocity = Vector2.zero;

    animator.SetTrigger("Attack");
}

// Monster walk
public void Walk()
{
    monsterState = STATE.WALK;

    AnimatorStateInfo ani_state_info = animator.GetCurrentAnimatorStateInfo(0);

    if (!ani_state_info.IsName("Walk"))
        animator.SetTrigger("Walk");

    GetComponent<Rigidbody2D>().AddForce(Vector3.left * speed);

}

// Monster hit
public void Hit()
{
    GameObject hit_effect = (GameObject)Instantiate(hitPrefab,
        hitPoint.position, Quaternion.identity);
    Destroy(hit_effect, 0.3f);

    if (hitCount > 2)
    {
        DoDestroy(1f);
        return;
    }

    hitCount++;

    CGameSound.PlayGameSound(hitAudioClip, transform.position);

    GetComponent<Rigidbody2D>().velocity = Vector2.zero;

    animator.SetTrigger("Hit");
}
```

```
// Monster "OnTrigger" event
void OnTriggerEnter2D(Collider2D collider)
{
    if (collider.tag == "DefenceArea")
    {
        Attack();
    }
    else if (collider.tag == "Bullet")
    {
        collider.SendMessage("DoDestroy", 0f);

        Hit();
    }
}

// Hit effect animation complete
public void HitAnimationComplete()
{
    if (monsterState == STATE.WALK)
        Walk();
    else
        Attack();
}

// Attack animation start complete
public void AttackAnimationStartComplete()
{
    GameObject hit_effect = (GameObject)Instantiate(attackHitPrefab,
        attackHitPoint.position, Quaternion.identity);
    Destroy(hit_effect, 0.3f);

    player.SendMessage("HitPlayer");
}

// Attack animation complete
public void AttackAnimationComplete()
{
    player.SendMessage("HitPlayer");
}

// Monster Death
public void DoDestroy(float delay_time = 0f)
{
    GetComponent<BoxCollider2D>().enabled = false;

    CGameInfo.GAME_SCORE += 1;

    GetComponent<Rigidbody2D>().velocity = Vector2.zero;

    animator.SetTrigger("Die");

    Destroy(gameObject, delay_time);
}

// Monster order z index
public void OrderZIndex()
```

```
{  
  
    float y = transform.position.y * 100f;  
  
    if (y <= 0)  
    {  
        y = Mathf.Abs(y);  
    }  
    else  
    {  
        y = -y;  
    }  
  
    spriteRenderer.sortingOrder = (int)y;  
  
}  
  
}
```