using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class EnemyPool : MonoBehaviour {

 public static EnemyPool instance;

 public int enemyPoolSize = 10;

 public GameObject enemyPrefab;

 public float timeVariable;

 public float startingSpawnRate1 = 1f;

 public float startingSpawnRate2 = 1f;

 public float spawnRate1 = 4f;

 public float spawnRate2 = 2f;

 public float spawnDoubleRate = 1f;

 public float spawnTripleRate = 1f;

 public float enemyMin = -1f;

 public float enemyMax = 3.5f;

 public bool slowDown;

 private GameObject[] enemies;

 private Vector2 objectPoolPosition = new Vector2 (-15, -25);

 private float timeSinceLastSpawned1;

 private float timeSinceLastSpawned2;

 //private float spawnYPosition = 10f;

 private int currentEnemy = 0;

 private int enemySpacing = 0;

 void Awake()

 {

 //If we don't currently have a game control...

 if (instance == null)

 //...set this one to be it...

 instance = this;

 //...otherwise...

 else if(instance != this)

 //...destroy this one because it is a duplicate.

 Destroy (gameObject);

 }

 void Start ()

 {

 slowDown = false;

 timeVariable = Time.timeScale;

 enemyPoolSize = 10;

 enemies = new GameObject[enemyPoolSize];

 for (int i = 0; i < enemyPoolSize; i++)

 {

 enemies [i] = (GameObject)Instantiate (enemyPrefab, objectPoolPosition, Quaternion.identity);

 enemies [i].GetComponent<Enemy> ().number = i;

 }

 //Spawn the first left-side enemy immediately

 startingSpawnRate1 = Random.Range(1f, 4f) / timeVariable;

 if (GameControl.instance.gameOver == false)

 {

 enemies [currentEnemy].transform.position = new Vector2 (-2.05f, 14f);

 enemies [currentEnemy].GetComponent<Enemy>().canFlip = false;

 enemies [currentEnemy].GetComponent<Enemy> ().attacking = false;

 enemies [currentEnemy].GetComponent<Enemy> ().idle = true;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().flipCount = 0;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().animCount = 0;

 enemies [currentEnemy].GetComponentInChildren<Attack> ().HFlipCount = 0;

 currentEnemy++;

 if (currentEnemy >= enemyPoolSize)

 {

 currentEnemy = 0;

 }

 }

 //Spawn the first right-side enemy immediately

 startingSpawnRate2 = Random.Range(1f, 4f) / timeVariable;

 if (GameControl.instance.gameOver == false)

 {

 enemies [currentEnemy].transform.position = new Vector2 (2.05f, 14f);

 enemies [currentEnemy].GetComponent<Enemy>().canFlip = true;

 enemies [currentEnemy].GetComponent<Enemy> ().attacking = false;

 enemies [currentEnemy].GetComponent<Enemy> ().idle = true;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().flipCount = 0;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().animCount = 0;

 enemies [currentEnemy].GetComponentInChildren<Attack> ().HFlipCount = 0;

 currentEnemy++;

 if (currentEnemy >= enemyPoolSize)

 {

 currentEnemy = 0;

 }

 }

 }

 void Update ()

 {

 timeSinceLastSpawned1 += Time.deltaTime;

 timeSinceLastSpawned2 += Time.deltaTime;

 spawnRate1 = Random.Range (8f, 15f) / timeVariable;

 spawnRate2 = Random.Range (8f, 15f) / timeVariable;

 if (GameControl.instance.gameOver == false && timeSinceLastSpawned1 >= spawnRate1)

 {

 timeSinceLastSpawned1 = 0;

 spawnDoubleRate = Random.Range(1f, 3f);

 spawnTripleRate = Random.Range (1f, 3f);

 enemies [currentEnemy].transform.position = new Vector2 (-2.05f, 14f);

 enemies [currentEnemy].GetComponent<Enemy>().canFlip = false;

 enemies [currentEnemy].GetComponent<Enemy> ().attacking = false;

 enemies [currentEnemy].GetComponent<Enemy> ().idle = true;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().flipCount = 0;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().animCount = 0;

 enemies [currentEnemy].GetComponentInChildren<Attack> ().HFlipCount = 0;

 currentEnemy++;

 if (currentEnemy >= enemyPoolSize)

 {

 currentEnemy = 0;

 }

 if (spawnDoubleRate >= 2f)

 {

 enemySpacing = Random.Range (22, 25);

 enemies [currentEnemy].transform.position = new Vector2 (-2.05f, enemySpacing);

 enemies [currentEnemy].GetComponent<Enemy>().canFlip = false;

 enemies [currentEnemy].GetComponent<Enemy> ().attacking = false;

 enemies [currentEnemy].GetComponent<Enemy> ().idle = true;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().flipCount = 0;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().animCount = 0;

 enemies [currentEnemy].GetComponentInChildren<Attack> ().HFlipCount = 0;

 currentEnemy++;

 if (currentEnemy >= enemyPoolSize)

 {

 currentEnemy = 0;

 }

 }

 if (spawnTripleRate == 1f)

 {

 enemySpacing = Random.Range (30, 33);

 enemies [currentEnemy].transform.position = new Vector2 (-2.05f, enemySpacing);

 enemies [currentEnemy].GetComponent<Enemy>().canFlip = false;

 enemies [currentEnemy].GetComponent<Enemy> ().attacking = false;

 enemies [currentEnemy].GetComponent<Enemy> ().idle = true;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().flipCount = 0;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().animCount = 0;

 enemies [currentEnemy].GetComponentInChildren<Attack> ().HFlipCount = 0;

 currentEnemy++;

 if (currentEnemy >= enemyPoolSize)

 {

 currentEnemy = 0;

 }

 }

 }

 if (GameControl.instance.gameOver == false && timeSinceLastSpawned2 >= spawnRate2)

 {

 timeSinceLastSpawned2 = 0;

 spawnDoubleRate = Random.Range(1f, 3f);

 spawnTripleRate = Random.Range (1f, 3f);

 enemies [currentEnemy].transform.position = new Vector2 (2.05f, 14f);

 enemies [currentEnemy].GetComponent<Enemy>().canFlip = true;

 enemies [currentEnemy].GetComponent<Enemy> ().attacking = false;

 enemies [currentEnemy].GetComponent<Enemy> ().idle = true;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().flipCount = 0;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().animCount = 0;

 enemies [currentEnemy].GetComponentInChildren<Attack> ().HFlipCount = 0;

 currentEnemy++;

 if (currentEnemy >= enemyPoolSize)

 {

 currentEnemy = 0;

 }

 if (spawnDoubleRate >= 2f)

 {

 enemySpacing = Random.Range (22, 25);

 enemies [currentEnemy].transform.position = new Vector2 (2.05f, enemySpacing);

 enemies [currentEnemy].GetComponent<Enemy>().canFlip = true;

 enemies [currentEnemy].GetComponent<Enemy> ().attacking = false;

 enemies [currentEnemy].GetComponent<Enemy> ().idle = true;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().flipCount = 0;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().animCount = 0;

 enemies [currentEnemy].GetComponentInChildren<Attack> ().HFlipCount = 0;

 currentEnemy++;

 if (currentEnemy >= enemyPoolSize)

 {

 currentEnemy = 0;

 }

 }

 if (spawnTripleRate == 1f)

 {

 enemySpacing = Random.Range (30, 33);

 enemies [currentEnemy].transform.position = new Vector2 (2.05f, enemySpacing);

 enemies [currentEnemy].GetComponent<Enemy>().canFlip = true;

 enemies [currentEnemy].GetComponent<Enemy> ().attacking = false;

 enemies [currentEnemy].GetComponent<Enemy> ().idle = true;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().flipCount = 0;

 enemies [currentEnemy].GetComponentInChildren<DetectPlayer> ().animCount = 0;

 enemies [currentEnemy].GetComponentInChildren<Attack> ().HFlipCount = 0;

 currentEnemy++;

 if (currentEnemy >= enemyPoolSize)

 {

 currentEnemy = 0;

 }

 }

 }

 }

}