**LAMPIRAN**

**LISTING PROGRAM**

**EnemyManager**

using System;

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

[Serializable]

public class EnemyManager {

public Transform spawnPoint;

[HideInInspector]public GameObject e\_instance;

public Transform[] patrolPoint;

private AIyo ai;

// Use this for initialization

public void Setup()

{

ai = e\_instance.GetComponent<AIyo>();

for(int i = 0; i<patrolPoint.Length;i++)

{

ai.point[i] = patrolPoint[i];

}

}

public void EnableControl()

{

ai.enabled = true;

}

public void DisableControl()

{

ai.enabled = false;

}

public void Reset()

{

e\_instance.transform.position = spawnPoint.position;

e\_instance.transform.rotation = spawnPoint.rotation;

e\_instance.SetActive(false);

e\_instance.SetActive(true);

}

}

**PlayerControl.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class PlayerControl : MonoBehaviour

{

Animator anim;

public AudioClip stepClip;

public AudioSource stepSource;

float front;

float turn;

// Use this for initialization

void Start()

{

anim = GetComponent<Animator>();

stepSource.clip = stepClip;

}

// Update is called once per frame

void Update()

{

front = Input.GetAxis("Vertical");

turn = Input.GetAxis("Horizontal");

anim.SetFloat("speed", front, 0.1f, Time.deltaTime);

anim.SetFloat("turn", turn, 0.1f, Time.deltaTime);

Vector3 movement = new Vector3(turn, 0.0f, front);

if (turn != 0 || front != 0)

{

transform.rotation = Quaternion.Slerp(transform.rotation, Quaternion.LookRotation(movement), 0.15F);

}

Sound();

}

void Sound()

{

if (Input.GetKeyDown(KeyCode.W) || Input.GetKeyDown(KeyCode.S) || Input.GetKeyDown(KeyCode.A) || Input.GetKeyDown(KeyCode.D))

{

stepSource.Play();

}

else if (turn == 0 && front == 00)

{

stepSource.Stop();

}

}

private void OnCollisionEnter(Collision collision)

{

if (collision.gameObject.CompareTag("Enemy"))

{

Destroy(gameObject);

}

}

}

**Ablility.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class Abilty : MonoBehaviour {

private Bomming droppedUp;

// Use this for initialization

void Start () {

droppedUp = GetComponent<Bomming>();

}

// Update is called once per frame

void Update () {

}

private void OnTriggerEnter(Collider other)

{

if (other.CompareTag("LimitUp"))

{

Destroy(other.gameObject);

droppedUp.maxDrop++;

}

else if (other.CompareTag("PowerUp"))

{

Destroy(other.gameObject);

GameManager.lengthFire++;

}

}

}

**clickOnLoad.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.SceneManagement;

public class clickOnLoad : MonoBehaviour {

public void LoadByIndex(int sceneIndex)

{

SceneManager.LoadScene(sceneIndex);

}

}

**Pause.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class Pause : MonoBehaviour {

public void PauseOnClick(bool a)

{

if(a == true)

{

Time.timeScale = 0;

}

else if (a == false)

{

Time.timeScale = 1;

}

}

}

**BankScore.cs**

using System.Collections;

using System.Collections.Generic;

using System;

using System.Runtime.Serialization.Formatters.Binary;

using System.IO;

using UnityEngine.UI;

using UnityEngine;

public class BankScore : MonoBehaviour {

public static BankScore bank;

public static List<ScoreName> listScore = new List<ScoreName>();

// Use this for initialization

void Awake()

{

if (bank == null)

{

DontDestroyOnLoad(gameObject);

bank = this;

}

else if (bank != null)

{

Destroy(gameObject);

}

}

private void OnEnable()

{

OnLoad();

}

private void OnDisable()

{

OnSave();

}

void Start () {

}

// Update is called once per frame

void Update () {

}

private void Sortir()

{

listScore.Sort();

listScore.Reverse();

}

void OnSave()

{

BinaryFormatter bf = new BinaryFormatter();

FileStream file = File.Create(Application.persistentDataPath + "/bank2.dat");

DataBank data = new DataBank();

data.listScore = listScore;

bf.Serialize(file, data);

file.Close();

}

void OnLoad()

{

if (File.Exists(Application.persistentDataPath + "/bank2.dat"))

{

BinaryFormatter bf = new BinaryFormatter();

FileStream file = File.Open(Application.persistentDataPath + "/bank2.dat", FileMode.Open);

DataBank data = (DataBank)bf.Deserialize(file);

file.Close();

listScore = data.listScore;

}

}

}

[Serializable]

class DataBank

{

public List<ScoreName> listScore = new List<ScoreName>();

}

**GetScoreName.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine.UI;

using UnityEngine;

public class GetScoreName : MonoBehaviour {

public InputField store;

public void AmbilNama()

{

if (BankScore.listScore.Count != 5)

{

BankScore.listScore.Add(new ScoreName(Disimpan.scoreWhenPlaying, store.text));

BankScore.listScore.Sort();

BankScore.listScore.Reverse();

}

else if(BankScore.listScore[4].angka < Disimpan.scoreWhenPlaying)

{

BankScore.listScore.RemoveAt(4);

BankScore.listScore.Add(new ScoreName(Disimpan.scoreWhenPlaying, store.text));

BankScore.listScore.Sort();

BankScore.listScore.Reverse();

}

Disimpan.scoreWhenPlaying = 0;

}

}

**InputHighScore.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine.UI;

using UnityEngine;

public class InputHighScore : MonoBehaviour {

private Text self;

private int currentValue;

// Use this for initialization

void Start () {

self = GetComponent<Text>();

}

// Update is called once per frame

void Update () {

if (currentValue < HighScore.value)

{

currentValue = HighScore.value;

}

self.text = currentValue.ToString();

}

}

**TampilkanHighScore.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.UI;

public class TamplikanHighScore : MonoBehaviour {

public Text[] nama;

public Text[] score;

// Use this for initialization

void Start() {

}

// Update is called once per frame

void Update () {

if (BankScore.listScore.Count >= 1)

{

for (int i = 0; i < BankScore.listScore.Count; i++)

{

nama[i].text = BankScore.listScore[i].nama;

score[i].text = BankScore.listScore[i].angka.ToString();

}

}

else

{

for (int i = 0; i < nama.Length; i++)

{

nama[i].text = string.Empty;

score[i].text = string.Empty;

}

}

}

}

**AIyo.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine.AI;

using UnityEngine;

public class AIyo : MonoBehaviour {

// [HideInInspector]public Transform[] point;

[HideInInspector]

public List<Transform> point = new List<Transform>();

private int bil;

private NavMeshAgent self;

private bool ketemu;

private bool patrol;

private Transform target;

private float startTimeelapsed;

// Use this for initialization

void Start () {

self = GetComponent<NavMeshAgent>();

ketemu = false;

patrol = true;

bil = 0;

}

// Update is called once per frame

void Update()

{

Look();

}

void Patrol()

{

self.destination = point[bil].position;

self.Resume();

if (self.remainingDistance <= self.stoppingDistance && !self.pathPending)

{

bil = Random.Range(0, point.Count);

}

}

void Look()

{

RaycastHit hit;

Debug.DrawRay(transform.position, transform.forward.normalized \* 5f, Color.green);

if (Physics.SphereCast(transform.position, 0.5f, transform.forward, out hit,5f)

&& hit.collider.CompareTag("Player"))

{

target = hit.transform;

Chaser();

}

else

{

Patrol();

}

}

void Chaser()

{

self.SetDestination(target.position);

self.Resume();

}

private void OnDrawGizmos()

{

Gizmos.DrawWireSphere(transform.position, 0.5f);

}

}

**Game manager.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.UI;

using UnityEngine.SceneManagement;

public class GameManager : MonoBehaviour {

public GameObject scorePanel;

public GameObject giveupButton;

public GameObject player;

public GameObject enemy;

public Transform spawnPlayer;

public Text defaultText;

public EnemyManager[] enemies;

public float waitDelay;

public AudioSource mainSOU;

public AudioClip bgm;

public AudioClip winClip;

public AudioClip loseClip;

public static int lengthFire;

private List<GameObject> playerCheck = new List<GameObject>();

private Scene scene;

private int currentSceneIndex;

private PlayerControl controlPlayer;

// Use this for initialization

void Start () {

lengthFire = 1;

mainSOU.clip = bgm;

mainSOU.Play();

scene = SceneManager.GetActiveScene();

currentSceneIndex = scene.buildIndex;

defaultText.text = string.Empty;

SpawnPlayer();

SetupPlayer();

SpawnAllEnemies();

StartCoroutine(StagePlay());

}

IEnumerator StagePlay()

{

yield return StartCoroutine(StartingPlay());

yield return StartCoroutine(Playing());

if (AllEnemyDie())

{

yield return StartCoroutine(GoodEnding());

}

else if(PlayerDie())

{

yield return StartCoroutine(BadEnding());

}

}

IEnumerator StartingPlay()

{

defaultText.text = "Stage " + currentSceneIndex.ToString();

ResetPlayer();

ResetEnemy();

DisableEnemyControl();

yield return new WaitForSeconds(waitDelay);

}

IEnumerator Playing()

{

defaultText.text = string.Empty;

EnablePlayerControl();

EnableEnemyControl();

while ( !PlayerDie() && !AllEnemyDie())

{

yield return null;

}

}

IEnumerator GoodEnding()

{

mainSOU.clip = winClip;

mainSOU.Play();

if (currentSceneIndex == 20)

{

defaultText.text = "CONGRATULATION FOR WIN ALL GAME";

yield return DecidingIfTop5();

}

else

defaultText.text = "GOOD JOB";

yield return new WaitForSeconds(waitDelay);

if (currentSceneIndex == 5)

{

SceneManager.LoadScene(0);

}

else

SceneManager.LoadScene(currentSceneIndex +1);

}

IEnumerator BadEnding()

{

mainSOU.clip = loseClip;

mainSOU.Play();

defaultText.text = "YOU LOSE";

yield return DecidingIfTop5();

yield return new WaitForSeconds(waitDelay);

SceneManager.LoadScene(0);

}

//~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~PLAYER~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

void SpawnPlayer()

{

GameObject a = (GameObject)Instantiate(player, spawnPlayer.position, Quaternion.identity);

playerCheck.Add(a);

}

void SetupPlayer()

{

controlPlayer = player.GetComponent<PlayerControl>();

}

void EnablePlayerControl()

{

controlPlayer.enabled = true;

}

void ResetPlayer()

{

player.transform.position = spawnPlayer.position;

player.transform.rotation = spawnPlayer.rotation;

player.SetActive(false);

player.SetActive(true);

}

//~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ENEMY~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

void SpawnAllEnemies()

{

for(int i = 0; i<enemies.Length;i++)

{

enemies[i].e\_instance = Instantiate(enemy, enemies[i].spawnPoint.position, Quaternion.identity) as GameObject;

enemies[i].Setup();

}

}

void EnableEnemyControl()

{

for (int i = 0; i < enemies.Length; i++)

{

enemies[i].EnableControl();

}

}

void DisableEnemyControl()

{

for (int i = 0; i < enemies.Length; i++)

{

enemies[i].DisableControl();

}

}

void ResetEnemy()

{

for(int i = 0; i<enemies.Length;i++)

{

enemies[i].Reset();

}

}

//#######################################################################################

bool AllEnemyDie()

{

int enemyDied = 0;

for (int i = 0; i<enemies.Length; i++)

{

if (!enemies[i].e\_instance)

enemyDied++;

}

return enemyDied == enemies.Length;

}

bool PlayerDie()

{

if (!playerCheck[0])

{

return true;

}

else

return false;

}

//########################################Scoring################################

IEnumerator DecidingIfTop5()

{

giveupButton.SetActive(false);

if(Disimpan.scoreWhenPlaying >0)

if (BankScore.listScore.Count != 5 || BankScore.listScore[4].angka < Disimpan.scoreWhenPlaying)

{

yield return new WaitForSeconds(waitDelay);

scorePanel.SetActive(true);

defaultText.text = string.Empty;

mainSOU.Stop();

while (scorePanel.activeSelf == true)

{

yield return null;

}

}

else yield return null;

}

void Pause()

{

Time.timeScale = 0;

}

void Resume()

{

Time.timeScale = 1;

}

}