**Cards.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine.UI;

using UnityEngine;

public class Cards : MonoBehaviour {

public static bool Flags = false;

[SerializeField]

private int \_state;

[SerializeField]

private int \_cardValue;

[SerializeField]

private bool \_initialized = false;

private Sprite \_cardBack;

private Sprite \_cardFace;

private GameObject \_manager;

void Start() {

\_state = 1;

\_manager = GameObject.FindGameObjectsWithTag ("Manager")[0];

}

public void setupGraphics() {

\_cardBack = \_manager.GetComponent<GameManager> ().getCardBack ();

\_cardFace = \_manager.GetComponent<GameManager> ().getCardFace (\_cardValue);

flipCard ();

}

public void flipCard() {

if (\_state == 0)

\_state = 1;

else if (\_state == 1)

\_state = 0;

if (\_state == 0 && !Flags) {

GetComponent<Image> ().sprite = \_cardBack;

} else if (\_state == 1 && !Flags) {

GetComponent<Image> ().sprite = \_cardFace;

}

}

public int cardValue {

get { return \_cardValue; }

set { \_cardValue = value; }

}

public int state {

get { return \_state; }

set { \_state = value; }

}

public bool initialized {

get { return \_initialized; }

set { \_initialized = value; }

}

public void falseCheck() {

StartCoroutine (pause());

}

IEnumerator pause(){

yield return new WaitForSeconds (1);

if (\_state == 0)

GetComponent<Image> ().sprite = \_cardBack;

else if(\_state == 1)

GetComponent<Image> ().sprite = \_cardFace;

Flags = false;

}

}

**timer.cs**

using System.Collections;

using UnityEngine.UI;

using UnityEngine.SceneManagement;

using System.Collections.Generic;

using UnityEngine;

public class timer : MonoBehaviour {

public Text timeText;

public float duration;

private float startTime;

[HideInInspector]

public float timerCounter;

void Start(){

startTime = Time.time;

}

// Update is called once per frame

void Update () {

timerCounter = Time.time - startTime;

timeText.text = "Time : " + timerCounter.ToString ();

}

}

**ScoreManager.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.SceneManagement;

using UnityEngine.UI;

public class ScoreManager : MonoBehaviour {

public int score = 0;

public Text maText;

public static float GameTime;

public float Ttime;

public GameObject timerRefeference;

public void UpdateScore(){

GameTime = timerRefeference.GetComponent<timer> ().timerCounter;

score++;

// 1 < 1

if (score == 1) {

maText.text = "Score:" + score;

PlayerPrefs.SetFloat ("Time", GameTime);

Ttime = PlayerPrefs.GetFloat ("Time");

Debug.Log (Ttime);

SceneManager.LoadScene ("mqs1");

}

Debug.Log ("Score Vaue : " + score);

}

}

**MenuBehave.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine.SceneManagement;

using UnityEngine;

public class MenuBehave : MonoBehaviour {

public void triggerMenuBehaviour(int i)

{

switch (i)

{

default:

case (0):

SceneManager.LoadScene("memory");

break;

case (1):

Application.Quit();

break;

}

}

// Use this for initialization

void Start () {

}

// Update is called once per frame

void Update () {

}

}

**MatcMakingGame.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.UI;

using UnityEngine.SceneManagement;

public class MatchMakingGame : MonoBehaviour {

[System.Serializable]

public struct Match

{

public Sprite correctImage;

public Sprite correctAnsImage;

public Button.ButtonClickedEvent OnCorrectCall;

public Sprite[] wrongAnswers;

public Button.ButtonClickedEvent OnWrongCall;

}

public Match[] matchOptions;

public Button[] optionButton;

// Use this for initialization

void Start () {

mInitializeMatchMakingGame (0);

//SceneManager.LoadScene ("mqs1");

}

private void mInitializeMatchMakingGame(int mMatchOptionIndex){

int mAnswerButtonIndex = Random.Range (0, optionButton.Length);

for (int index = 0; index < optionButton.Length; index++) {

if (mAnswerButtonIndex == index) {

optionButton [index].image.sprite = matchOptions [mMatchOptionIndex].correctImage;

optionButton [index].onClick = matchOptions [mMatchOptionIndex].OnCorrectCall;

} else {

int mNumberOfWrongAnswer = matchOptions [mMatchOptionIndex].wrongAnswers.Length;

optionButton [index].image.sprite = matchOptions [mMatchOptionIndex].wrongAnswers[Random.Range(0,mNumberOfWrongAnswer)];

optionButton [index].onClick = matchOptions [mMatchOptionIndex].OnWrongCall;

}

}

}

}

**GameManager.cs**

using System.Collections;

using UnityEngine.UI;

using UnityEngine.SceneManagement;

using System.Collections.Generic;

using UnityEngine;

public class GameManager : MonoBehaviour {

public static GameManager Instance;

public static float GameTime;

public Sprite[] cardFace;

public Sprite cardBack;

public GameObject[] cards;

public Text matchText;

public GameObject timerRefeference;

private bool \_init = false;

public int \_matches = 3;

void Start(){

Instance = this;

matchText.text = "Remain: " + \_matches.ToString ();

}

void Update() {

if (!\_init)

initializeCards ();

if (Input.GetMouseButtonUp (0))

checkCards();

}

public void initializeCards(){

for (int id = 0; id < 2; id++) {

for (int i = 1; i < 3; i++) {

bool test = false;

int choice = 0;

while (!test) {

choice = Random.Range (0, cards.Length);

test = !(cards [choice].GetComponent<Cards> ().initialized);

}

cards [choice].GetComponent<Cards> ().cardValue = i;

cards [choice].GetComponent<Cards> ().initialized = true;

}

}

foreach (GameObject c in cards)

c.GetComponent<Cards> ().setupGraphics ();

if (!\_init)

\_init = true;

}

public Sprite getCardBack(){

return cardBack;

}

public Sprite getCardFace(int i){

return cardFace [i - 1];

}

void checkCards(){

List<int> c = new List<int> ();

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

if (cards [i].GetComponent<Cards> ().state == 1)

c.Add (i);

}

if (c.Count == 2)

cardComparison (c);

}

void cardComparison(List <int> c){

Cards.Flags = true;

int x = 0;

if (cards [c [0]].GetComponent<Cards> ().cardValue == cards [c [1]].GetComponent<Cards> ().cardValue) {

x = 2;

\_matches--;

matchText.text = "Remain:" + \_matches;

if (\_matches == 0) {

GameTime = timerRefeference.GetComponent<timer> ().timerCounter;

SceneManager.LoadScene ("finishScene");

}

}

for (int i = 0; i < c.Count; i++) {

cards [c [i]].GetComponent<Cards> ().state = x;

cards [c [i]].GetComponent<Cards> ().falseCheck ();

}

}

}

**finishG.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine.SceneManagement;

using UnityEngine;

public class finishinG : MonoBehaviour {

public void triggerMenuBehaviour(int i)

{

switch (i)

{

default:

case (0):

SceneManager.LoadScene("menu");

break;

}

}

// Use this for initialization

void Start () {

}

// Update is called once per frame

void Update () {

}

}

**finalText.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.UI;

public class finalText : MonoBehaviour {

public float m\_EstimatedTime;

public float m\_PlayerTime;

public float m\_performance;

public Text mText;

// Use this for initialization

void Start () {

m\_EstimatedTime = 5.0f;

m\_PlayerTime = PlayerPrefs.GetFloat ("Time");

Debug.Log ("Player Time : " + m\_PlayerTime);

Debug.Log ("Estimated Time : " + m\_EstimatedTime);

m\_performance = (m\_EstimatedTime / m\_PlayerTime) \* 100.0f;

Debug.Log ("Performance : " + m\_performance);

if (m\_performance < m\_EstimatedTime) {

mText.text = "Excellent";

Debug.Log ("Excellent");

} else {

if (m\_performance >= 75) {

mText.text = "Great!";

Debug.Log ("Great!");

} else if (m\_performance >= 50) {

mText.text = "Good";

Debug.Log ("Good");

} else if (m\_performance >= 25) {

mText.text = "Poor";

Debug.Log ("Poor");

} else {

mText.text = "Bad";

Debug.Log ("Bad");

}

}

}

}

**BackButton.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.SceneManagement;

public class BackButton : MonoBehaviour {

public void triggerMenuBehaviour(int i)

{

switch (i)

{

default:

case (0):

SceneManager.LoadScene("menu");

break;

}

}

}

**SC1.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.SceneManagement;

using UnityEngine.UI;

public class SC1 : MonoBehaviour {

public int score = 1;

public Text maText;

public static float GameTime;

public float Ttime;

public GameObject timerRefeference;

public void UpdateScore(){

GameTime = timerRefeference.GetComponent<timer> ().timerCounter;

score++;

// 1 < 1

if (score == 2) {

maText.text = "Score:" + score;

Ttime = PlayerPrefs.GetFloat ("Time");

Debug.Log (Ttime);

PlayerPrefs.SetFloat ("Time", GameTime);

Ttime = Ttime + PlayerPrefs.GetFloat ("Time");

PlayerPrefs.SetFloat ("Time", Ttime);

Debug.Log (Ttime);

SceneManager.LoadScene ("mqs2");

}

Debug.Log ("Done");

}

}

**SC2.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.SceneManagement;

using UnityEngine.UI;

public class SC2 : MonoBehaviour {

public int score = 2;

public Text maText;

public static float GameTime;

public float Ttime;

public GameObject timerRefeference;

public void UpdateScore(){

GameTime = timerRefeference.GetComponent<timer> ().timerCounter;

score++;

// 1 < 1

if (score == 3) {

maText.text = "Score:" + score;

Ttime = PlayerPrefs.GetFloat ("Time");

Debug.Log (Ttime);

PlayerPrefs.SetFloat ("Time", GameTime);

Ttime = Ttime + PlayerPrefs.GetFloat ("Time");

PlayerPrefs.SetFloat ("Time", Ttime);

Debug.Log (Ttime);

SceneManager.LoadScene ("mqs3");

}

Debug.Log ("Done");

}

}

**SC2.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.SceneManagement;

using UnityEngine.UI;

public class SC2 : MonoBehaviour {

public int score = 2;

public Text maText;

public static float GameTime;

public float Ttime;

public GameObject timerRefeference;

public void UpdateScore(){

GameTime = timerRefeference.GetComponent<timer> ().timerCounter;

score++;

// 1 < 1

if (score == 3) {

maText.text = "Score:" + score;

Ttime = PlayerPrefs.GetFloat ("Time");

Debug.Log (Ttime);

PlayerPrefs.SetFloat ("Time", GameTime);

Ttime = Ttime + PlayerPrefs.GetFloat ("Time");

PlayerPrefs.SetFloat ("Time", Ttime);

Debug.Log (Ttime);

SceneManager.LoadScene ("mqs3");

}

Debug.Log ("Done");

}

}

**SC3.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.SceneManagement;

using UnityEngine.UI;

public class SC3 : MonoBehaviour {

public int score = 3;

public Text maText;

public static float GameTime;

public float Ttime;

public GameObject timerRefeference;

public void UpdateScore(){

GameTime = timerRefeference.GetComponent<timer> ().timerCounter;

score++;

// 1 < 1

if (score == 4) {

maText.text = "Score:" + score;

Ttime = PlayerPrefs.GetFloat ("Time");

Debug.Log (Ttime);

PlayerPrefs.SetFloat ("Time", GameTime);

Ttime = Ttime + PlayerPrefs.GetFloat ("Time");

PlayerPrefs.SetFloat ("Time", Ttime);

Debug.Log (Ttime);

SceneManager.LoadScene ("finishScene1");

}

Debug.Log ("Done");

}

}

**SC4.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.SceneManagement;

using UnityEngine.UI;

public class SC4 : MonoBehaviour {

public int score = 4;

public Text maText;

public void UpdateScore(){

score++;

// 1 < 1

if (score == 5) {

maText.text = "Score:" + score;

SceneManager.LoadScene ("mqs5");

}

Debug.Log ("Done");

}

}

**SC5.cs**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.SceneManagement;

using UnityEngine.UI;

public class SC5 : MonoBehaviour {

public int score = 5;

public Text maText;

public void UpdateScore(){

score++;

// 1 < 1

if (score == 6) {

maText.text = "Score:" + score;

SceneManager.LoadScene ("finishScene");

}

Debug.Log ("Done");

}

}

**firebase.cs**

using System;

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

using UnityEngine.UI;

using UnityEngine.Events;

using Firebase;

using Firebase.Database;

using Firebase.Unity.Editor;

public class FirebaseRealTimeDatabaseHandler : MonoBehaviour {

public string databaseURL;

public int count;

FirebaseApp m\_FirebaseApp;

DependencyStatus m\_DependencyStatus;

DatabaseReference m\_DatabaseReference;

private bool m\_IsFirebaseDatabaseReady = false;

// Use this for initialization

void Start () {

PreProcess ();

}

public void cnt(){

count++;

}

// Update is called once per frame

void Update () {

}

private void PreProcess(){

FirebaseApp.CheckAndFixDependenciesAsync ().ContinueWith (task => {

m\_DependencyStatus = task.Result;

if(m\_DependencyStatus == DependencyStatus.Available){

m\_FirebaseApp = FirebaseApp.DefaultInstance;

m\_FirebaseApp.SetEditorDatabaseUrl(databaseURL);

if(m\_FirebaseApp.Options.DatabaseUrl != null){

m\_FirebaseApp.SetEditorDatabaseUrl(m\_FirebaseApp.Options.DatabaseUrl);

}

m\_IsFirebaseDatabaseReady = true;

}else{

Debug.Log("Database exception : " + m\_DependencyStatus);

}

});

}

public void RegisterUserOnDatabase(){

FirebaseDatabase.DefaultInstance.RootReference

.Child ("User")

.SetValueAsync (count).ContinueWith (task => {

if(task.IsCompleted){

cnt();

Debug.Log("Complete");

}else{

Debug.Log("Not complete");

}

});

}

}