Course Project : Health_V

(VR museum based on healthcare)

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Scripts in code:

1) **Class_player.cs**

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class class_player : MonoBehaviour
{
	public GameObject GO_gameLogic;

	public void fn_checkMovement()
	{
		GO_gameLogic.GetComponent<class_gameLogic>().fn_checkMovement();
	}
}
```

2) **Class_orb.cs**

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;

public class class_orb : MonoBehaviour
{
	public Material mat_normal;
	public Material mat_glow;
```

```
	private Renderer rend;
	public int int_id;
	///public AudioSource audioSource;
	public AudioSource audioSource_player;

	public GameObject GO_gameLogic;

	void Start()
	{
		/// Get the renderer of the ball
		rend = GetComponent<Renderer>();
		///audioSource = GetComponent<AudioSource>();
	}

	public void fn_initOrb()
	{
		/// Debug.Log("Initializing Orb: " + int_id);
		rend.material = mat_normal;
	}

	public void fn_click()
	{
		/// audioSource.Play();
		audioSource_player.Play();
		rend.material = mat_normal;

GO_gameLogic.GetComponent<class_gameLogic>().fn_clickedOrb(this.transform.position,
int_id);
	}

	public void fn_pointerEnter()
	{
		rend.material = mat_glow;
	}

	public void fn_pointerExit()
	{
		rend.material = mat_normal;
	}
}
```

3) Class_gameLogic.cs

```
using System.Collections;
```

```
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.Video;

public class class_gameLogic : MonoBehaviour
{
	public GameObject[] arr_GO_orb;

	public AudioSource audioSource_player;

	public GameObject GO_player;
	public float float_playerHeight;
	public int int_playerPos;
	public int int_playerLastPos;

	public GameObject GO_welcomeScreen;
	public GameObject GO_infoScreen1;
	public GameObject GO_exitScreen;

	public GameObject[] arr_GO_screen;


	//  S T A R T
	void Start()
	{
		fn_initGame();
	}

	//  I N I T
	private void fn_initGame()
	{
		Vector3 l_vec3_pos = arr_GO_orb[0].transform.position;
		l_vec3_pos.y = float_playerHeight;
		GO_player.transform.position = l_vec3_pos;

		GO_welcomeScreen.SetActive(true);
		GO_infoScreen1.SetActive(false);
	}

	//  B U T T O N S
	public void fn_startButton()
	{
		GO_welcomeScreen.SetActive(false);
		GO_infoScreen1.SetActive(true);
```

```
        audioSource_player.Play();

        for(int i = 0; i < arr_GO_orb.Length; i++)
                arr_GO_orb[i].GetComponent<class_orb>().int_id = i;
}

public void fn_letsGoButton()
{
        GO_infoScreen1.SetActive(false);
        GO_exitScreen.SetActive(false);
        audioSource_player.Play();

        int_playerPos = 0;
        fn_movePlayer(arr_GO_orb[1].transform.position, 1);
}

public void fn_exitButton()
{
        /// Debug.Log("Will not exit in Editor mode");
        Application.Quit();
}

public void fn_clickedOrb(Vector3 p_point, int p_int_id) //  1
{
        fn_disableAllOrbs();
        fn_pauseAllVideos();
        if(p_int_id == 8)
        {
                GO_welcomeScreen.SetActive(false);
                GO_exitScreen.SetActive(false);
        }
        fn_movePlayer(p_point, p_int_id);
}

private void fn_pauseAllVideos() //  2
{
        for(int i = 0; i < arr_GO_screen.Length; i++)
                arr_GO_screen[i].GetComponent<VideoPlayer>().Pause();
}

private void fn_movePlayer(Vector3 p_point, int p_int_id) //  3
{
        int_playerLastPos = int_playerPos;
        int_playerPos     = p_int_id;
```

```
		/// Debug.Log("Moving to " + int_playerPos);

		fn_iTweenPlayerToPoint(p_point);
	}

	//  P L A Y E R  M O V E M E N T  //
	/// iTween movement to a point
	private void fn_iTweenPlayerToPoint(Vector3 p_point) //  4
	{
		p_point.y = float_playerHeight;

		iTween.MoveTo
		(
			GO_player,
			iTween.Hash
			(
				"position", p_point,
				"speed", 5,
				"easetype", "linear",
				"oncomplete", "fn_checkMovement"
			)
		);
	}

	public void fn_checkMovement() //  5
	{
		if(int_playerPos == 2 || int_playerPos == 7)
		{

			if(int_playerLastPos == int_playerPos - 1)
			{
				/// Debug.Log("Reached " + int_playerPos + ", Moving to " +
(int_playerPos + 1));
				fn_movePlayer(arr_GO_orb[int_playerPos + 1].transform.position,
int_playerPos + 1);
			}
			else
				fn_movePlayer(arr_GO_orb[int_playerPos - 1].transform.position,
int_playerPos - 1);
		}
		else if(int_playerPos == 8)
		{
			if(int_playerLastPos == 7)
				fn_movePlayer(arr_GO_orb[0].transform.position, 0);
```

```
                else
                        fn_movePlayer(arr_GO_orb[7].transform.position, 7);
        }
        else
                fn_enableDisableOrbs();
}

private void fn_enableDisableOrbs()
{
        int l_int_nextOrbID, l_int_prevOrbID;

        l_int_nextOrbID = int_playerPos + 1;
        if(l_int_nextOrbID >= arr_GO_orb.Length)
                l_int_nextOrbID = 0;

        l_int_prevOrbID = int_playerPos - 1;
        if(l_int_prevOrbID < 0)
                l_int_prevOrbID = arr_GO_orb.Length - 1;

        fn_disableAllOrbs();

        if(l_int_nextOrbID != 1)
        {
                arr_GO_orb[l_int_nextOrbID].SetActive(true);
                ///arr_GO_orb[l_int_nextOrbID].GetComponent<class_orb>().fn_initOrb();
        }
        arr_GO_orb[l_int_prevOrbID].SetActive(true);
        ///arr_GO_orb[l_int_prevOrbID].GetComponent<class_orb>().fn_initOrb();

        if(l_int_nextOrbID == 1)
        {
                GO_welcomeScreen.SetActive(true);
                GO_exitScreen.SetActive(true);
        }
        fn_playVideo();
}

private void fn_disableAllOrbs()
{
        for(int i = 0; i < arr_GO_orb.Length; i++)
                arr_GO_orb[i].SetActive(false);
}

private void fn_playVideo()
```

```
        {
                if(int_playerPos == 1)
                {
                        arr_GO_screen[0].GetComponent<VideoPlayer>().Play();
                        /// Debug.Log("Video playing on Screen: 0");
                }
                else if(int_playerPos >= 3 && int_playerPos <= 6)
                {
                        arr_GO_screen[int_playerPos - 2].GetComponent<VideoPlayer>().Play();
                        /// Debug.Log("Video playing on Screen: " + (int_playerPos - 2));
                }
        }

        //  U P D A T E
        void Update()
        {
                /// To quit the application when X button is pressed
                if(Input.GetKeyDown(KeyCode.Escape))
                {
                        fn_exitButton();
        }
        }
}
```