Assignment # 03



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**CSE-411 Intro to Game Development**

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Section: C

“On my honor, as a student of the University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work”

Submitted to:

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**Step 1:** Created a new scene

**Step 2:** Then created a panel and a script named PanelFader and applied on the panel gameobject.

**Step 3:** By pressing “space” it panel fade in and by pressing “W” it fade out

**Panel Fader Script:**

using System.Collections;

using UnityEngine;

using UnityEngine.UI;

public class PanelFader : MonoBehaviour

{

public float fadeDuration = 1.0f; // Duration for fade in/out

private Image panelImage;

private void Start()

{

// Get the Image component of the panel

panelImage = GetComponent<Image>();

if (panelImage == null)

{

Debug.LogError("No Image component found on this panel!");

}

}

private void Update()

{

if (Input.GetKeyDown(KeyCode.Space))

{

FadeIn();

}

if (Input.GetKeyDown(KeyCode.W))

{

FadeOut();

}

}

// Fade in the panel

public void FadeIn()

{

StartCoroutine(FadePanel(0f, 1f)); // Fade from transparent to opaque

}

// Fade out the panel

public void FadeOut()

{

StartCoroutine(FadePanel(1f, 0f)); // Fade from opaque to transparent

}

// Coroutine to handle fading logic

private IEnumerator FadePanel(float startAlpha, float endAlpha)

{

float elapsedTime = 0f;

// Get the current color of the panel

Color panelColor = panelImage.color;

// Loop over time to adjust the alpha value

while (elapsedTime < fadeDuration)

{

elapsedTime += Time.deltaTime;

float alpha = Mathf.Lerp(startAlpha, endAlpha, elapsedTime / fadeDuration);

panelImage.color = new Color(panelColor.r, panelColor.g, panelColor.b, alpha);

yield return null; // Wait for the next frame

}

// Ensure the panel reaches the exact target alpha

panelImage.color = new Color(panelColor.r, panelColor.g, panelColor.b, endAlpha);

}

}

