# Unit 1- Lesson 9. Displaying Scores and Texts, Adding Sounds for Collision

**Aim:**

* In a simple Unity game, how do we display scores and texts?

**Objectives:** After the lesson, students should be able to:

* Write script to keep tracking score, display score and texts

**Motivation:**

* Game, game, game

**CLASS PROCEDURE:**

***Do Now:***

Open your rolling sphere scene /. Game in Unity. How do we count the cubes collected and display the number on the screen? Also when the sphere collects the cubes, how do we add a collision sound effect?

***Class Discussion:***

1. To display texts, we need to import the UnityEngine.UI package.
2. Text is an object in the UnityEngine.UI package. We can create a Text and give it a name, say

public Text winText;

and later on, we can call winText.text = “abcd….”

***Pair – sharing Activity #1:***

Modify your script for Rolling Sphere, keep tracking the number of collected objects, display the score and also display the text when the player wins.

using UnityEngine;

using UnityEngine.UI;

using System.Collections;

public class PlayerController : MonoBehaviour {

public float speed;

public Text countText;

public Text winText;

private Rigidbody rb;

private int count;

void Start ()

{

rb = GetComponent<Rigidbody>();

count = 0;

SetCountText ();

winText.text = "";

}

void FixedUpdate ()

{

float moveHorizontal = [Input.GetAxis](http://docs.unity3d.com/Documentation/ScriptReference/Input.GetAxis.html) ("Horizontal");

float moveVertical = [Input.GetAxis](http://docs.unity3d.com/Documentation/ScriptReference/Input.GetAxis.html) ("Vertical");

Vector3 movement = new Vector3 (moveHorizontal, 0.0f, moveVertical);

rb.AddForce (movement \* speed);

}

void OnTriggerEnter(Collider other)

{

if (other.gameObject.CompareTag ( "Pick Up"))

{

other.gameObject.SetActive (false);

count = count + 1;

SetCountText ();

}

}

void SetCountText ()

{

countText.text = "Count: " + count.ToString ();

if (count >= 12)

{

winText.text = "You Win!";

}

}

}

***Pair – sharing Activity #2:***

How do we add collision sound to our games?

1. Check out the website, it provides many free collision sounds:

<http://soundbible.com/tags-crash.html>

1. Download a collision sound effect, and import it to your game assets.
2. In the OnTriggerEnter() method, under your conditional statement, call the sound clip.

Here’s an example, assume your audioSource is called PlayOneShot, and you can call the collision sound like this:

using UnityEngine;

using System.Collections;  
  
[[RequireComponent](https://docs.unity3d.com/ScriptReference/RequireComponent.html)(typeof([AudioSource](https://docs.unity3d.com/ScriptReference/AudioSource.html)))]

public class ExampleClass : [MonoBehaviour](https://docs.unity3d.com/ScriptReference/MonoBehaviour.html)

{

public [AudioClip](https://docs.unity3d.com/ScriptReference/AudioClip.html) impact;

[AudioSource](https://docs.unity3d.com/ScriptReference/AudioSource.html) audioSource;  
  
 void Start()

{

audioSource = GetComponent<[AudioSource](https://docs.unity3d.com/ScriptReference/AudioSource.html)>();

}  
  
 void OnCollisionEnter()

{

audioSource.PlayOneShot(impact, 0.7F);

}

}