

Introduction to C# programming and Unity

Week 3 - Exercise 13

More Unity practice

The Unity's prefab system basically acts as a template used to create new instances of the same object in the scene. Any edits made to a Prefab Asset are automatically reflected in the instances of that Prefab, allowing to easily make broad changes across your whole Project without having to repeatedly make the same edit to every copy of the Asset.

1. Creating sprites

Sprites are created in the appropriate folder in the Project window.

2. Add sprites to scene (Implementing prefabs)

The game object (goldball) is dragged from the sprites folder to the Hierarchy window and a prefab instance of the dragged 'goldball' is created under 'Prefabs' folder in Project window and renamed as 'Ball'. The 'goldball' in the Hierarchy window is renamed to 'Goldball' and its position is changed to upper right corner. The prefab instance 'ball' is dragged to the 'Project' window and that game object is renamed as 'Redball' and moved to bottom left. The sprite 'redball' is added to the Sprite Renderer of the game object 'Redball'. This replaces the 'goldball' with 'redball' retaining the changes in the position in the game space.

Therefore, though 'Redball' was initially a prefab instance of 'ball' (i.e.,goldball), changing the value of Sprite in the Sprite Renderer section of the Inspector window replaces the sprite with which the prefab instance was created(goldball) while retaining the properties like Position.

3. Make teddy bears move (Making changes in prefabs)

A script to move the game object right was created and attached to the 'Goldball' object. The object behaves appropriately i.e., Moves to the right. But the other game object 'Redball' doesn't move. But changes are applied to the prefab tab of the 'Goldball', both the objects (Goldball and Redball) move right i.e., as per the script.

Therefore, attaching any component(script here) to the game object adds behavior to that object alone. But applying the changes in the prefab section i.e., the prefabs is reflected in all the instances of the prefabs in the scene.