

How To Add Custom Persistent Properties for Furniture

In this tutorial, I will show you how to add custom persistent properties for Furniture, like id, name, durability ...

1. Add Custom Properties

Go to and have a look at FurnitureCustomPersistentProperties class at:

“Assets/RoomBuildingStarterKit/Assets/Scripts/Components/FurniturePropertiesExample.cs”

Here I added three properties: ID, Name and Durability. You can replace to your properties. Notice that all the properties need to add [JsonProperty] attribute for serialized by Newtonsoft.json library.

```
[JsonObject(MemberSerialization.OptIn)]
10 references | unknown, 3 hours ago | 1 author, 1 change
public class FurnitureCustomPersistentProperties
{
    /// <summary>
    /// Gets or sets the furniture id.
    /// </summary>
    [JsonProperty]
    2 references | unknown, 3 hours ago | 1 author, 1 change
    public Guid ID { get; set; }

    /// <summary>
    /// Gets or sets the furniture name.
    /// </summary>
    [JsonProperty]
    4 references | unknown, 3 hours ago | 1 author, 1 change
    public string Name { get; set; }

    /// <summary>
    /// Gets or sets the furniture durability.
    /// </summary>
    [JsonProperty]
    4 references | unknown, 3 hours ago | 1 author, 1 change
    public float Durability { get; set; }

    /// <summary>
    /// Converts the instance to string.
    /// </summary>
    /// <returns></returns>
    2 references | unknown, 3 hours ago | 1 author, 1 change
    public override string ToString()
    {
        return $"CustomProperties: {this.Name}, {this.Durability}";
    }

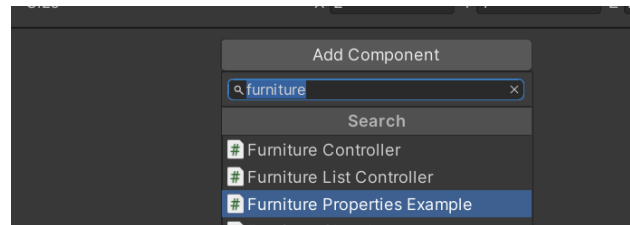
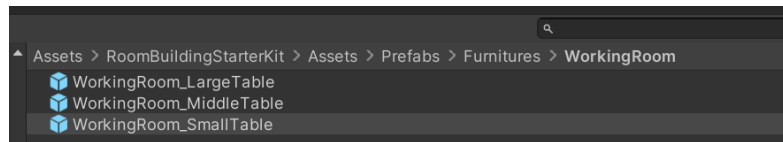
    /// <summary>
    /// Assigns example values to the new created instance.
    /// </summary>
    /// <param name="example">The property examples.</param>
    1 reference | unknown, 3 hours ago | 1 author, 1 change
    public void Assign(FurniturePropertiesExample example)
    {
        this.ID = Guid.NewGuid();
        this.Name = example.Name;
        this.Durability = example.Durability;
    }
}
```

2. Display and Modify the Properties

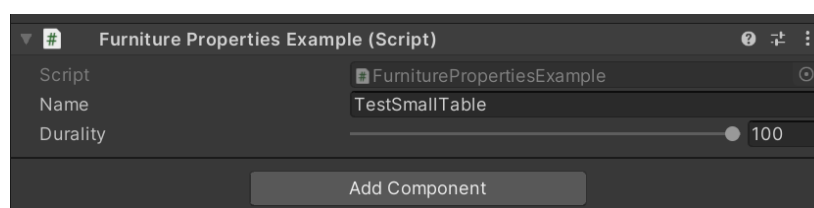
Below FurnitureCustomPersistentProperties class, I added an FurniturePropertiesExample class which derived from MonoBehaviour. This is an example class give a way to display and modify the custom properties on the furniture. **Normally, these properties should be changed in game by player or your scripts or NPC interacting with the furniture, but not like what I did in Unity Editor in this doc (Just show you how it works).**

First, let's add a FurniturePropertiesExample component for WorkingRoom_SmallTable.prefab under:

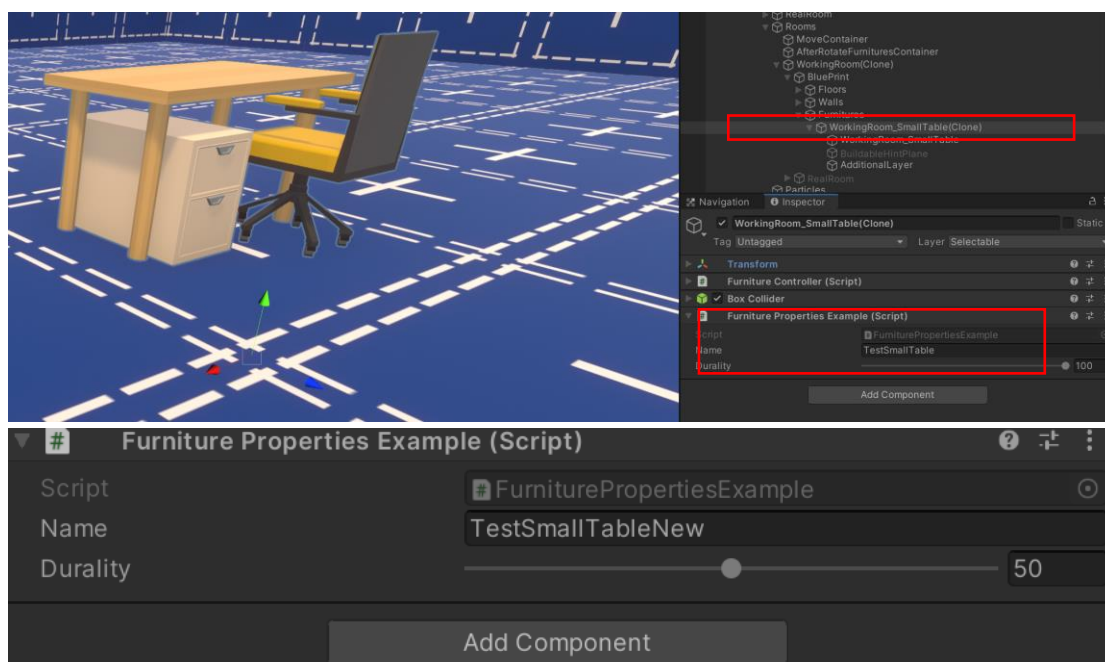
“Assets/RoomBuildingStarterKit/Assets/Prefabs/Furnitures/WorkingRoom”



Give it a name and set its durability.



Run the demo scene, blueprint a working room then put a small table, select the table object in Hierarchy window. Move the table, you can see the properties will keep with the table but not reset.



Build the room, the properties will keep with the table. Then change its value again. Back to blueprint mode, the properties will be taken to the table under blue print mode which means if you don't destroy the table the properties can follow with it even though you copy the room. These properties can also be persistent when you save/load game.

If I left something unclear or if you encounter any problem to this project. Please don't hesitate to contact with me with:

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Discord: <https://discord.gg/J7JTGqcf3v>