

3D Pottery Lowpoly Pack

Version 2.2

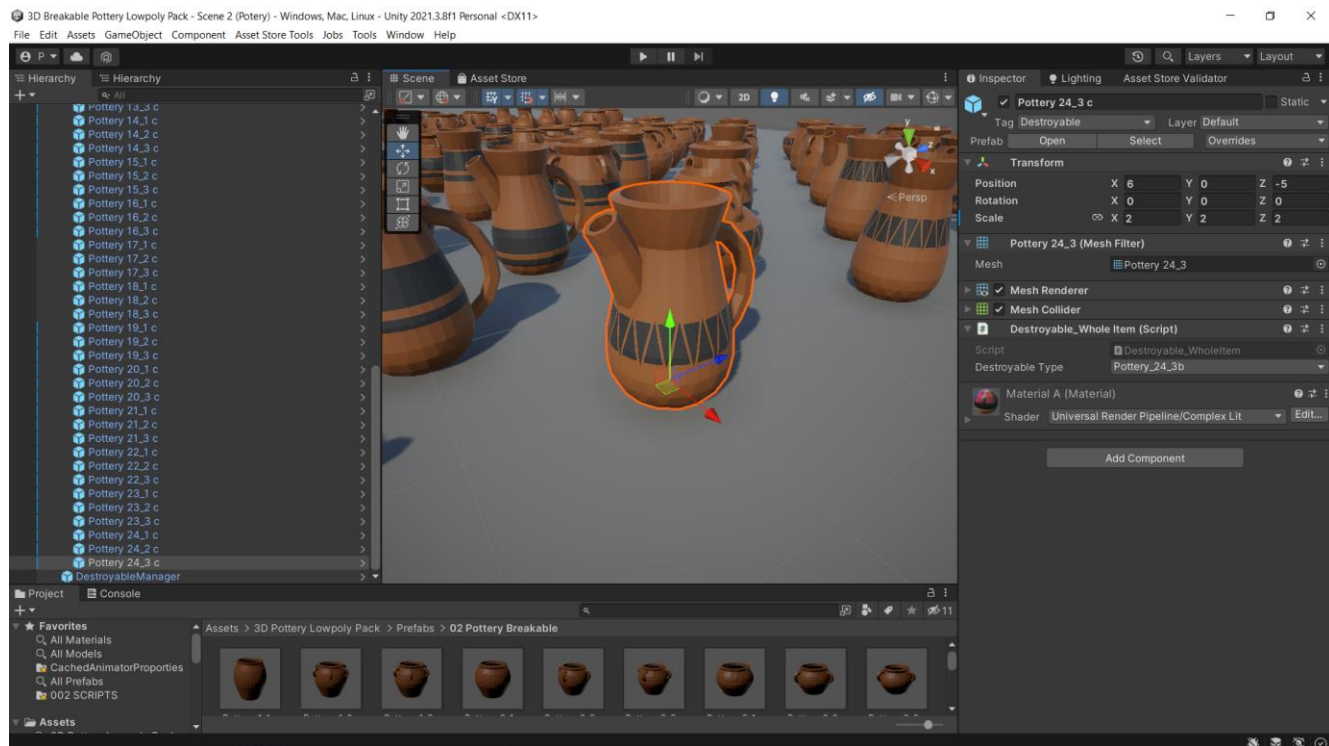
- **Introduction:**

Believe Asset is really easy to use. All of scripts are on more than simple level. Please be aware that some of solutions used in scripts were designed in order to keep garbage collection on low level.

Hope that information's below are more than enough for asset "know how ". If you will have any problems concerning this pack, please do not hesitate to contact me directly.

- **How this work:**

Inside asset there are pots in perfect conditions and broken to pieces.

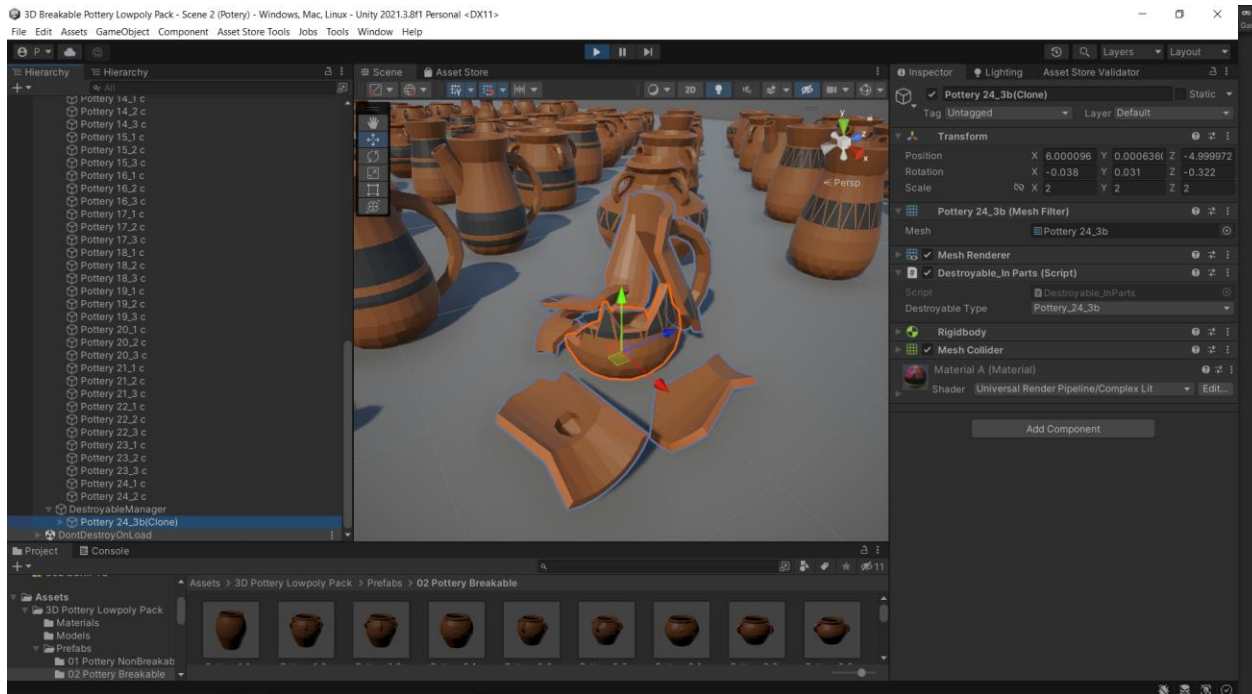


Non broken pots had "Destroyable_Whole_Item" script attached to them.

Inside "Destroyable_Whole_Item" script:

- **public void Destroy()** is located – allows for destruction of item ignoring chosen Action Type (example: imagine huge explosion which supposed to destroy all items ignoring they amount of durability).
- **public void TryDestroy_AcordingToAction()** is located: allows for destroy attempt. Attempt will be successful if chosen Action Type will be meet (example: imagine player hitting barrel by mace. Barrel will be destroyed when durability reach zero).

When public void Destroy is called. Script will Instantiate new broken pot and copy all of transform parameters of original item. Then will destroy original pot.



How to setup scene:

1. With breakable pottery.

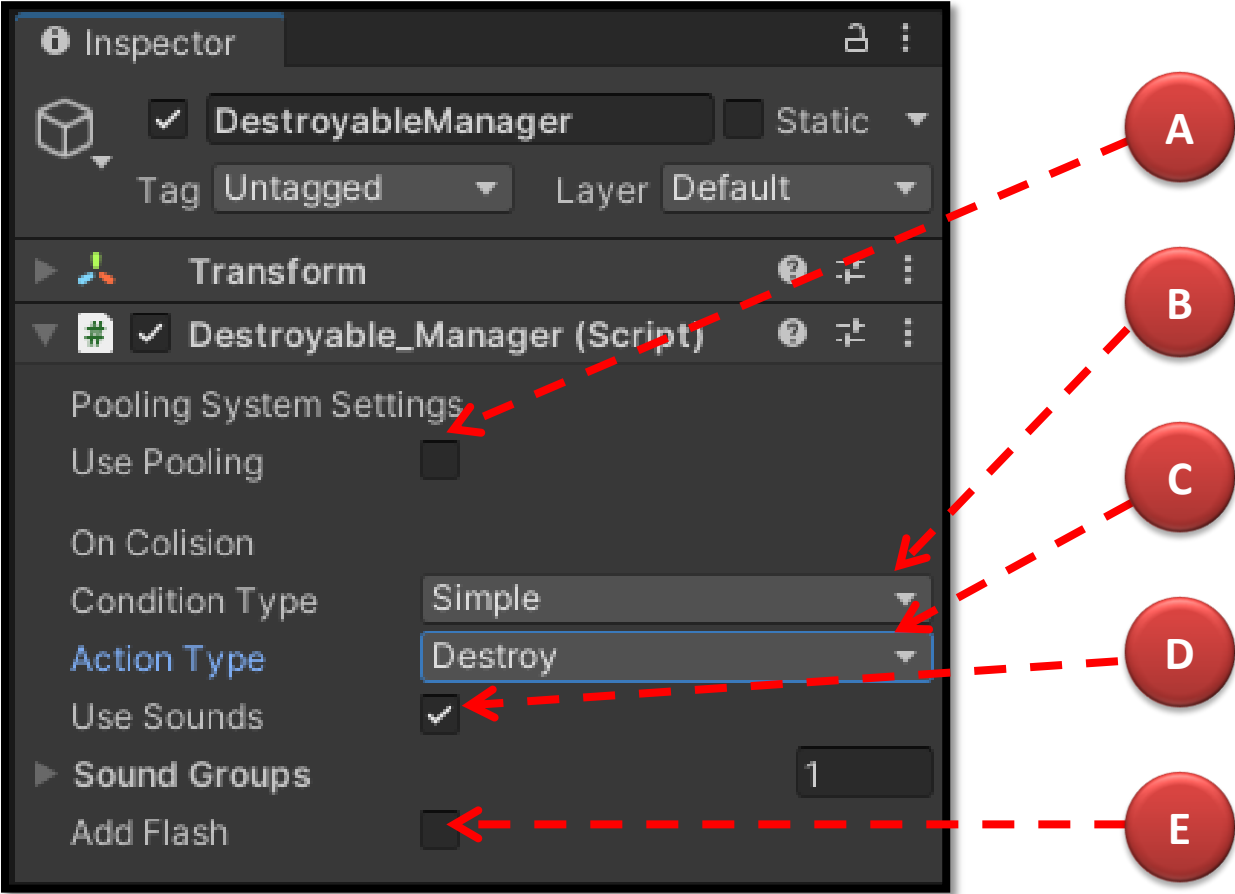
- Start new scene;
- Drag drop prefab of “DestroyableManager” to your scene, (located in: 3D Pottery Lowpoly Pack → Prefabs), please remember that this manager already holding references to all prefabs of breakable pottery included in asset pack.
- Drag drop prefab of chosen breakable pottery to your scene (located in: 3D Pottery Lowpoly Pack → Prefabs → 02 Pottery Breakable), please take notice that this prefabs names are ending with letter c (ex. Pottery 1_1c) and have “Destroyable” Tag attached to them.
- Attached script “CameraRay” to camera in your scene.
- Now when you are in play mode, using left mouse button under breakable pottery will effect in replacing clicked game object with instantiated new prefab (consisting of broken pieces of clay vessel).
- In order to conduct above procedure without CameraRay script: just call public void Destroy located on Script “Destroyable_WholeItem” attached to drag dropped prefab.

2. With non- breakable pottery.

- Start new scene;
- Drag drop prefab of chosen non- breakable pottery (located in: 3D Pottery Lowpoly Pack → Prefabs → 01 Pottery NonBreakable).

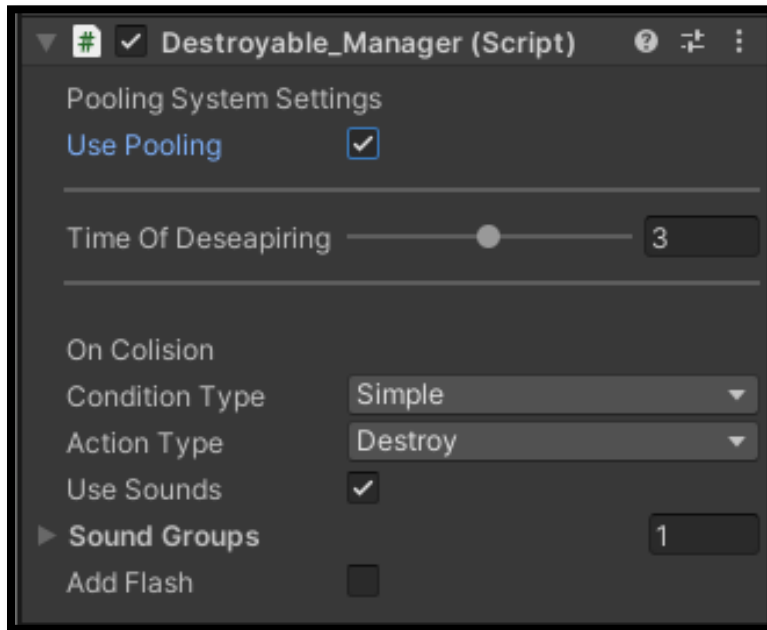
Destroyable Manager:

This is game object, with attached script handling instantiation of breakable pottery.



A	Toggle switch enabling/ disabling recovery of broken pottery.
B	Drop Down field allowing for choosing global settings of Condition Type
C	Drop Down field allowing for choosing global settings of Action Type
D	“ Use Sounds ” Toggle, and Sound Groups
D	“ Add Flash ” Toggle

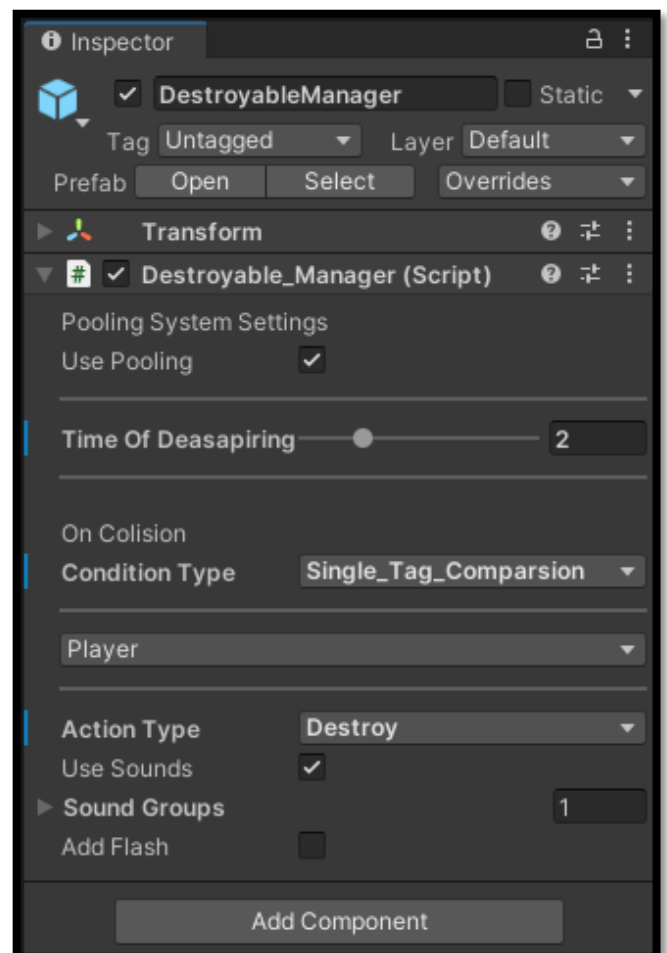
Destroyable Manager: Use Pooling:

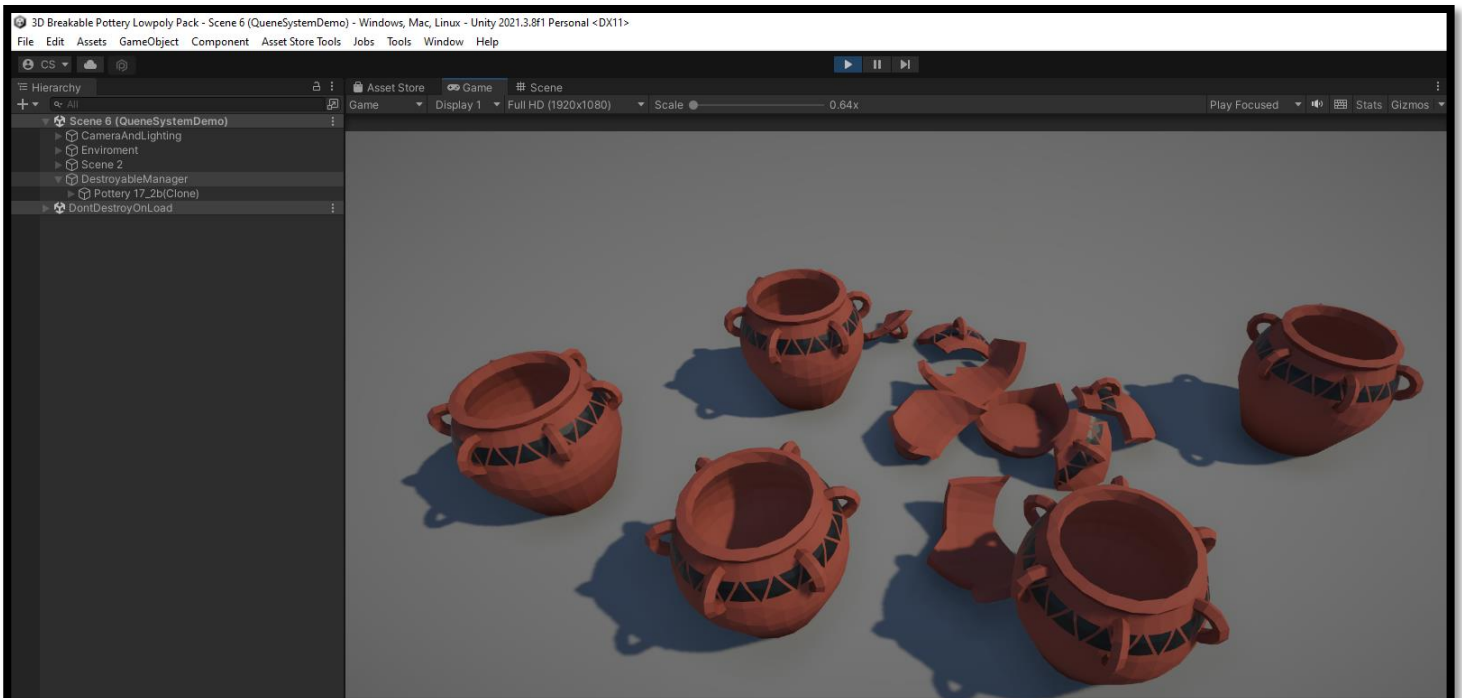


Object pooling allows for reduction of garbage collected during Play. If used Destroy Manager on Start() will create Queue of Items and will recover them instead of destroying them after time set in “**Time of Deseapiring**”.

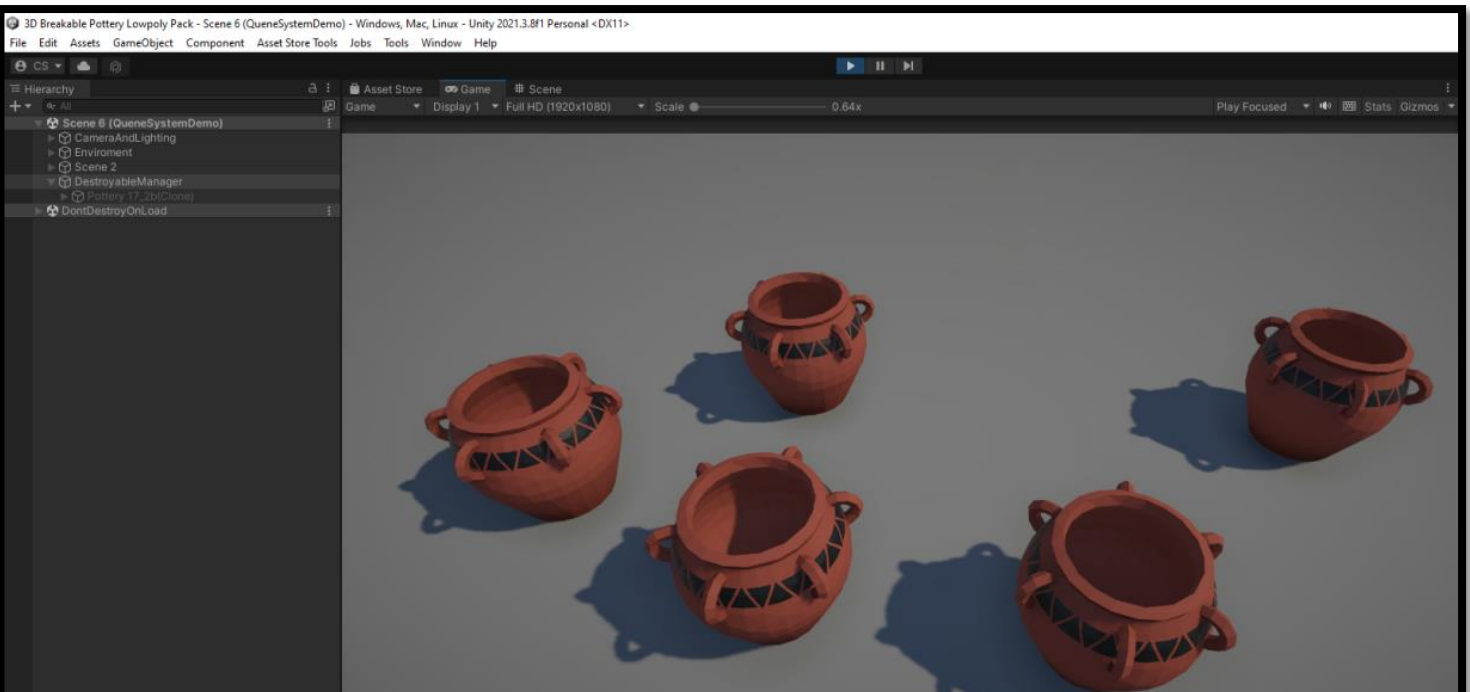
In order to learn how to use implemented pooling system:

1. Open “Scene 6 (QueneSystemDemo)”
2. Inspect “DestroyableManager” in scene.
3. Enter Play mode.
4. Click pot IOT destroy it.





6. Pot was destroyed. Under “DestroyableManager” Pottery 17_2(Clone) was created.



7. After 2 sec Pottery 17_2b(Clone) disappear from scene and awaits for Condition meet to be activated.

Destroyable Manager: Condition Types:

Simple

Condition will be met each time when "OnCollisionEnter" occurs;

Single TAG Comparison

Condition will be met when Game Object which collider case OnCollisionEnter had selected TAG attached.

Multiple TAG Comparison

Condition will be met when Game Object which collider case OnCollisionEnter had any selected TAG attached.

In order to learn how to use Condition Types:

Inspect:

1. Scene 3 (ConditionType - Simple);
2. Scene 4 (ConditionType - Single Tag Comparison);
3. Scene 5 (ConditionType - Multiple Tag Comparison)

Destroyable Manager: Action Types:

Destroy

Item will be destroyed;

Damage Constant

Item on start will receive amount of durability, each time when condition type will be met durability will be reduced by one. When durability reaches zero will be destroyed.

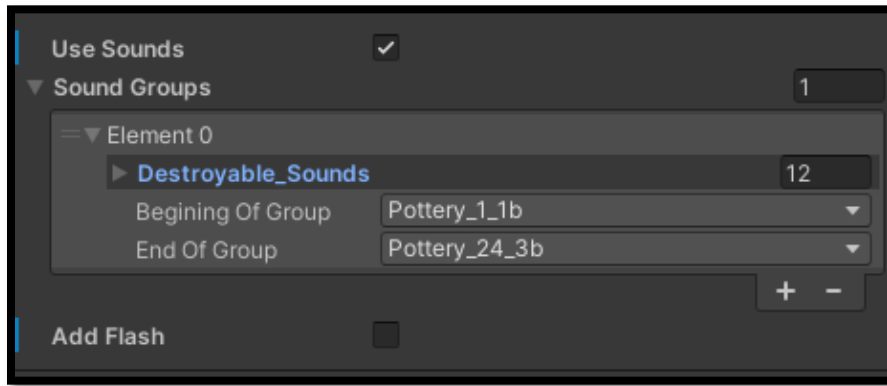
Damage Random

Item on start will receive amount of durability, each time when condition type will be met durability will be reduced by random from min – max value. When durability reaches zero will be destroyed;

Chance Random

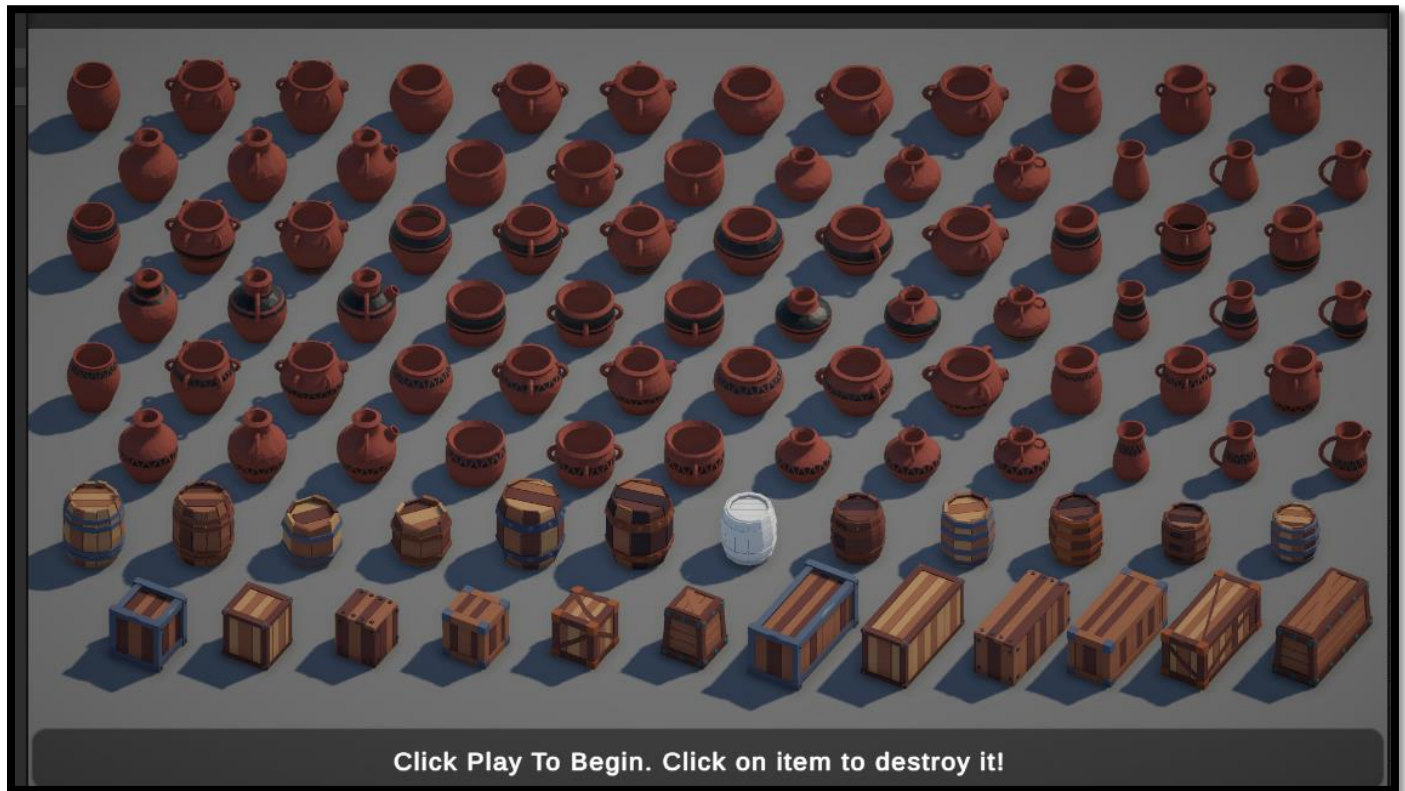
Each time when condition type will be met there will be chance for item destruction.

Destroyable Manager: Use Sounds:



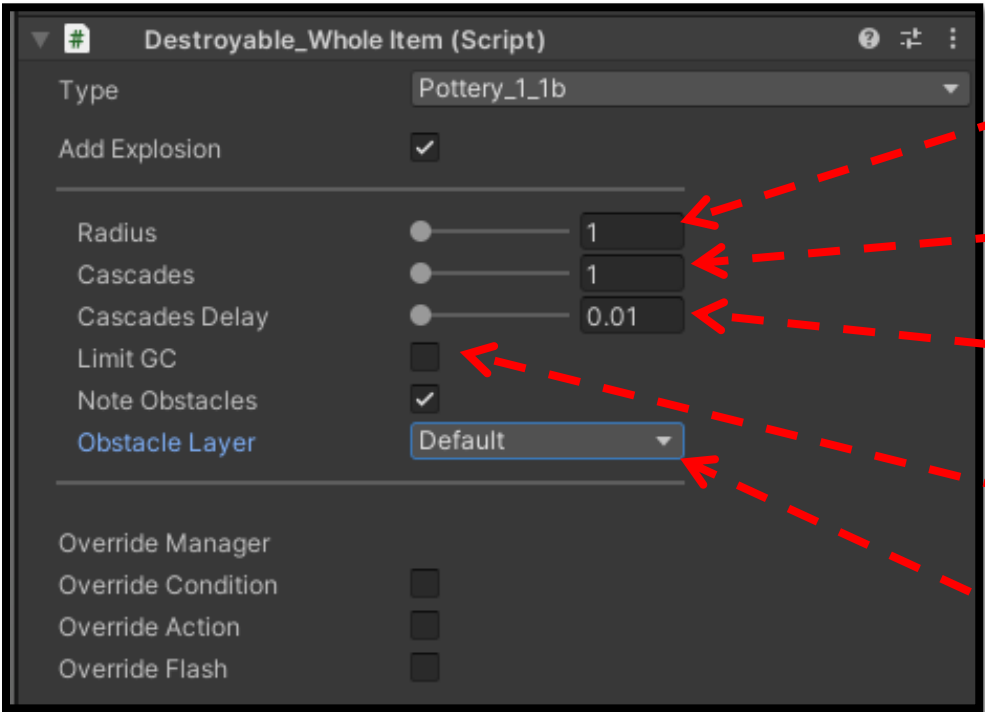
If “Use Sounds” Toggle is activated Sound Groups will be presented. Each Sound group has Beginning and End of group. Please be aware that items in “Destroyable_InParts_Name” are grouped in order by real world material type (Pots, Barrels and Chests). This order allows for easy implementation on missing sound groups.

Destroyable Manager: Use Flash:



When “Use Flash” Toggle is selected, when item receives damage or it’s destroyed for ordered amount of time will flash according to “FlashMaterial” located in “Materials” folder.

Destroyable_WholeItem: Adding Explosion:



A	Radius of explosion
B	Cascades- allows for cutting radius in pieces and conducting destruction in each piece in order of distance (poor attempt of imitating shockwave)
C	Cascade Delay – how much time will pass till next radius will be hit by shockwave of explosion
D	“Limit GC” Toggle, allows for Garbage Collection reduction
D	“Note Obstacles” Toggle, allows for preventing explosion from reaching items behind obstacles attached to chosen layer;

Destroyable_WholeItem: Overriding Manager:

Override Condition;

Allows for individual setup of condition for chosen Item;

Override Action Type:

Allows for individual setup of action type for chosen Item;

Override Flash:

Allows for individual setup of flash for chosen Item;