

My Pooler – Object Pooler - Documentation

Welcome to the documentation of **My Pooler – Object Pooler**! Firstly, I would like to tell you I am very, very happy that you gave my asset a chance, and I really hope you enjoy it!

For any questions, bug reports or suggestions please contact me at my discord “Carlinhu#3159”.

I’d be tremendously grateful if you could rate my package in your asset store downloads or leave a review on this asset page.

Getting Started

Setting up

The asset contains one main script called ObjectPooler.cs that controls all the functions of your pools, and a secondary script called PooledObjInterface that will handle some functionalities of the pool. All the scripts are detailed below.

- ObjectPooler.cs: This will be the main script added to your ObjectPooler object. It will handle all the pools that you want to create and its functionalities.
- PooledObjInterface.cs: This is the interface that will handle the method that will be called at the moment an object is called from any pool. This is useful to take care of fields that need to be reseted.

ObjectPooler.cs

Properties:

| <u>Property</u> | <u>Type</u> | <u>Description</u> |
|---------------------|-------------|--|
| isDebug | bool | If you want to see debug messages on console. |
| shouldDestroyOnLoad | bool | If you want to destroy the ObjectPooler object or not during scenes transitions. |
| pools | List<Pools> | A list that holds all the different pools created by the user. |
| Pool | | |
| size | int | The number of pools the user wants. |

| <u>Property</u> | <u>Type</u> | <u>Description</u> |
|-----------------|-------------|---|
| tag | string | The exact name used to identify this pool. |
| prefab | GameObject | The prefab of the object that the user wants on the pool. |
| amount | int | The number of objects the user wants the pool to start with. |
| souldExpandPool | bool | If the pool should be incremented in case it reaches the its own limit. |
| extensionLimit | int | The limit of incrementations it can have if shouldExpandPool is set to true. Set to zero or less for unlimited. |

- You can get the ObjectPooler object on the Prefabs folder. This asset is supposed to work as a generic object pooler, where you can have different pools and handle them easily. From there, all you need to do is setup your pool and create your own logic to handle the pool functionality. You can see a simple example below of how the system works.

Example

Methods: Those are the methods you will call get the object and return it to the pool. Both are in located **ObjectPooler.cs**:

```
public GameObject GetFromPool(string tag, Vector3 position, Quaternion rotation)...
public void ReturnToPool(string tag, GameObject o)...
```

You can call them like this:

```
MyPooler.ObjectPooler.Instance.GetFromPool("The specific pool tag", Vector3 ThePositionYouWant, Quaternion TheRotationYouWant);
MyPooler.ObjectPooler.Instance.ReturnToPool("The speficic pool tag", GameObject TheGameObject);
```

If you have checked the “ShouldExpandPool” check box, in case your pool runs out of objects, it will automatically create another object and increment the pool size as it needs.

In case you need to reset some of your pooled object settings after getting it from the pool, you will need to used the “OnObjectPooled()” method from **PooledObjInterface.cs**.

Your pooled object class must inherit from `PooledObjInterface`, and must have implemented the methods “`OnObjectPooled()`” and “`Discard()`”.

```
public class GenericObject : MonoBehaviour, PooledObjInterface
{
```

Inside the method “`OnObjectPooled`” you will reset all your settings (if you have variables such as health or points to be reseted, this is the right place). This method will automatically be called when you get an object from the pool. The “`Discard()`” method is used by the reset functions on **ObjectPooler.cs**, so you must implement the “`ReturnToPool()`” method on it, just like on the example below.

```
Script de Unity | 0 referências
public class GenericObject : MonoBehaviour, PooledObjInterface
{
    public string poolTag = "GenericObject";
    public float points = 0;
    public int health = 100;

    2 referências
    public void OnObjectPooled()
    {
        //RESET YOUR OBJECT SETTINGS HERE
        //Example:
        points = 0f;
        health = 100;
    }

    3 referências
    public void Discard()
    {
        //DISCARD YOUR OBJECT HERE
        MyPooler.ObjectPooler.Instance.ReturnToPool(poolTag, this.gameObject);
    }
}
```

In case you need to instantly reset all of your pools or one of them, you can use the methods “ResetAllPools()” or “ResetPool(string)”. See example below:

```
0 referências
void ResetMyPools()
{
    ...
    MyPooler.ObjectPooler.Instance.ResetAllPools();
}

0 referências
void ResetPool()
{
    ...
    MyPooler.ObjectPooler.Instance.ResetPool("MyPoolTag");
}
```

There will be a simple demonstration on the project to clear things up, but if you have any question about it, feel free to contact me through Discord. I will be very happy to help you! 😊

This asset and documentation were created by Carlos Menezes Concencio