

Bag code

```
using MiNET.Utls.Skins;
```

```
using System;
```

```
using System.Collections.Generic;
```

```
using System.Linq;
```

```
using System.Text;
```

```
using System.Threading.Tasks;
```

```
namespace SwinAdventure
```

```
{
```

```
    public class Bag : Item
```

```
    {
```

```
        private Inventory _inventory;
```

```
        public Bag(string[] ids, string name, string desc) : base(ids, name, desc)
```

```
        {
```

```
            _inventory = new Inventory();
```

```
        }
```

```
        public override string GetFullDescription()
```

```
        {
```

```
            return $" You are {Name}, a brave adventurer. You are holding" + _inventory.ItemList;
```

```
        }
```

```
        public Inventory Inventory
```

```
        {
```

```
            get { return _inventory; }
```

```
        }
```

```
        public GameObject Locate(string id)
```

```
        {
```

```

        if (AreYou(id))
        {
            return this;
        }

        return _inventory.Fetch(id);
    }
}

}

```

Bag test code

```

using NUnit.Framework;
using SwinAdventure;

```

```

namespace BagTesting

```

```

{
    public class BagTesting
    {
        private Bag _bag;
        private Item _item1;
        private Item _item2;
        private Bag _bag2;

        [SetUp]
        public void Setup()
        {
            _bag = new Bag(new string[] { "bag1" }, "Bag 1", "A bag for items");
            _item1 = new Item(new string[] { "item1" }, "Item 1", "An item");
            _item2 = new Item(new string[] { "item2" }, "Item 2", "Another item");
            _bag2 = new Bag(new string[] { "bag2" }, "Bag 2", "Another bag");
        }
    }
}

```

[Test]

```
public void TestBagLocatesItems()
{
    // Add an item to the bag and verify it's located in the inventory
    _bag.Inventory.Put(_item1);
    Assert.AreEqual(_item1, _bag.Inventory.Fetch("item1"));
}
```

[Test]

```
public void TestBagLocatesItself()
{
    // Ensure the bag can locate itself by its identifier
    Assert.AreEqual(_bag, _bag.Locate("bag1"));
}
```

[Test]

```
public void TestBagLocatesNothing()
{
    // Ensure the bag returns null for a non-existent item
    Assert.IsNull(_bag.Locate("nonexistent"));
}
```

[Test]

```
public void TestBagFullDescription()
{
    // Add an item and check if the full description contains the item
    _bag.Inventory.Put(_item1);
    Assert.IsTrue(_bag.GetFullDescription().Contains("item1"));
}
```

```

[Test]
public void TestBagInBag()
{
    // Add bag2 to bag1's inventory
    _bag.Inventory.Put(_bag2);

    // Verify that bag1 can locate bag2
    Assert.AreEqual(_bag2, _bag.Locate("bag2"));

    // Verify that bag1 can locate items within itself but not inside bag2
    _bag.Inventory.Put(_item1);
    _bag2.Inventory.Put(_item2);

    Assert.AreEqual(_item1, _bag.Locate("item1"));
    Assert.IsNull(_bag.Locate("item2"));
}

public void TestPutItemInInventory()
{
    Item item1 = new Item(new string[] { "item1" }, "Item 1", "A test item");
    _bag.Inventory.Put(item1);

    // Check if the item was added
    Assert.IsTrue(_bag.Inventory.HasItem("item1"));
}
}

```

