Digable 2D Terrain

Version 1.1.3

Introduction

This asset helps you create 2D Terrain and dig down through the ground. You can add destructible terrain to your game environment. (The destruction is based on line intersections).

Quick Access

- Terrain2D
- RoundCorner
- Shovel (New Features)
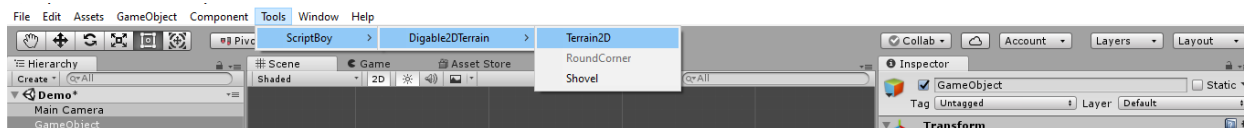- Quality Settings
- URP 2D Lights
- Links

Terrain2D

Description

The Terrain 2D takes an array of three or more points, and draws a polygon.

Getting started

To add a Terrain2D component go to **Tools > ScriptBoy > Digable2DTerrain > Terrain2D.**
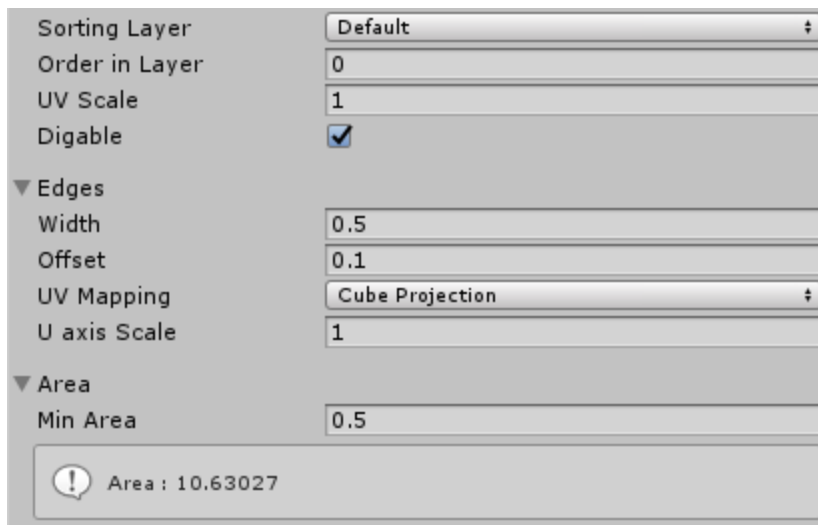

Edit Mode

You can edit the polygon by moving handles.

Adding New Point: Hold **Alt** button then drag a Point.
Grid Snapping: You can snap a point by holding **Shift** Button.
Delete Point: You can delete a point by holding **Ctrl** Button.

Properties

Sorting Layer: Set the name of this Renderer's Sorting Layer.
Order in Layer: Set the Renderer's order within a Sorting Layer.
UV Scale: Scale the polygon UV.
☑ **Digable:** Is it digable ?

Edges

UV Mapping: Set the UV Mapping Method.
Width: Set the width of Edges.
Offset: Set the offset of Edges.
U axis Scale: Scale U axis of Edges.

Area
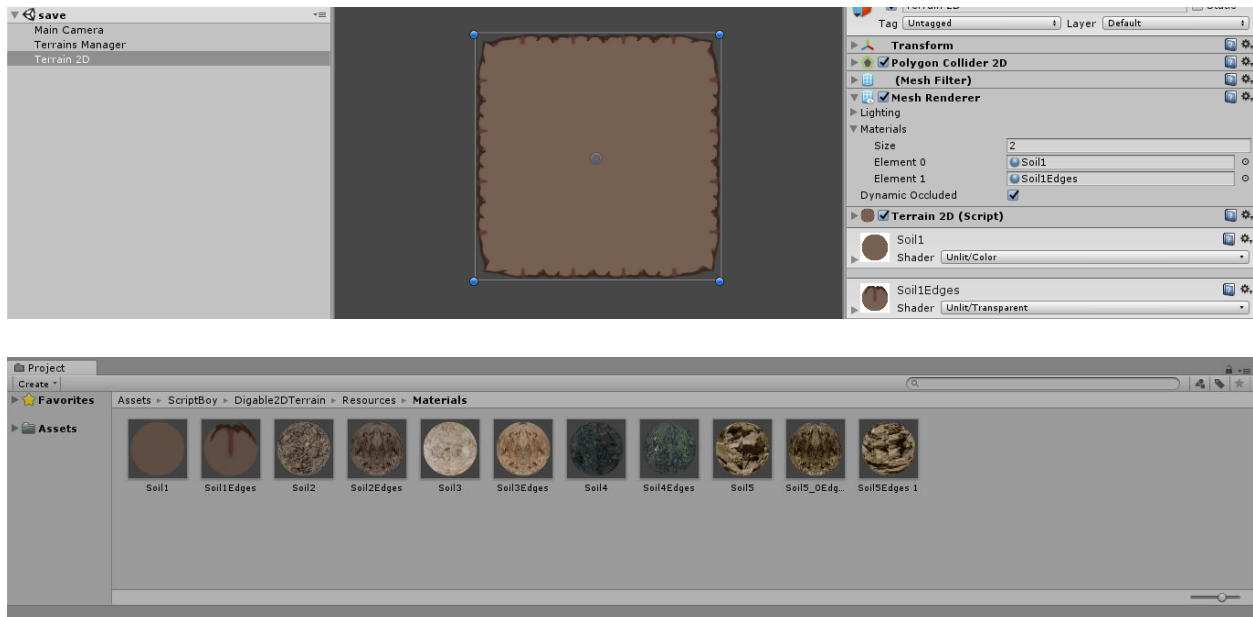
Min Area: Destroy if (**area < minArea**).
Area: The area of the polygon.

Materials

To set materials go to **MeshRenderer > Materials.**
1st Material: Polygon.
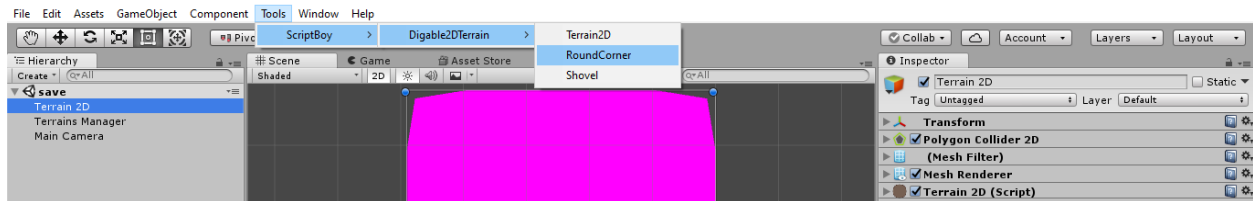**2nd Material:** Edges.

RoundCorner (Terrain2D Modifier)

Description

The RoundCorner gets Terrain2D, and adds extra positions to get rounded corners.

Getting started

To add a RoundCorner component go to **Tools > ScriptBoy > Digable2DTerrain > RoundCorner.**

Properties

Corner Position Count: Add extra positions to get rounded corners.

Radius: The maximum radius of each corner.
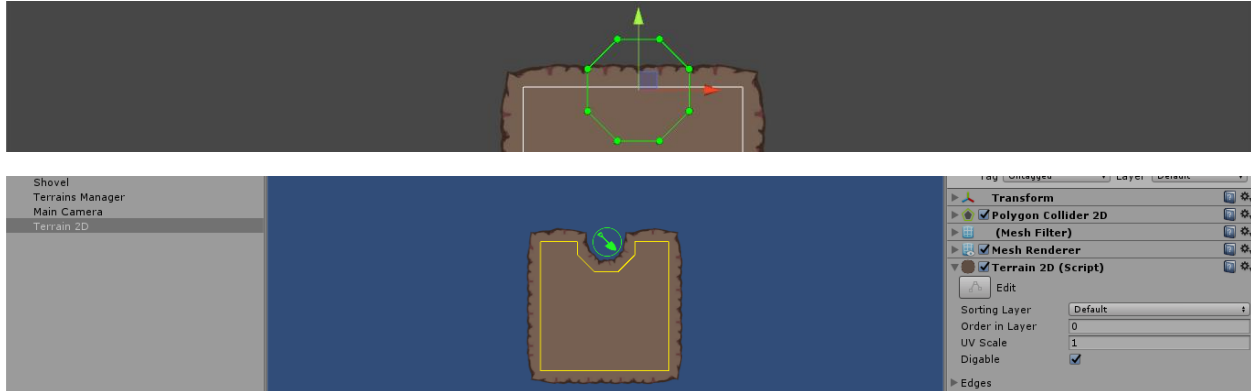
Buttons

Apply: Apply modifier and remove it.
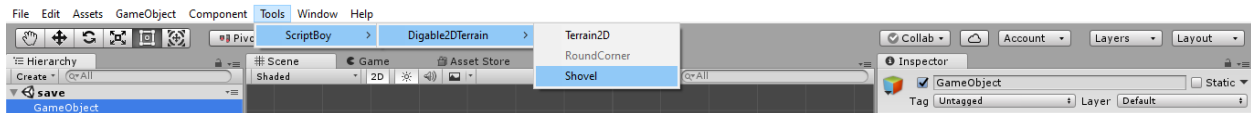
Remove: Remove modifier.

Shovel

Description

The Shovel makes a circle, and uses it to dig all terrains inside the circle.
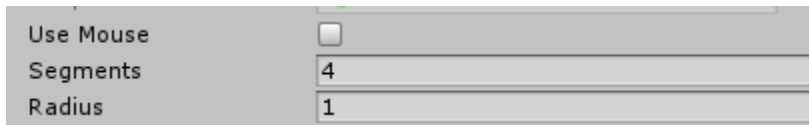

Getting started

To add a Shovel component go to **Tools > ScriptBoy > StickFigure > Shovel.**

Properties

☑ **Use Mouse:** Make shovel follow mouse position.**(You can use Mouse buttons for dig the ground)**
Segments: Set the segment count of the circle.
Radius: Set the radius of the circle.

Using Shovel in a Script

The shovel has a main method called **Dig()**. It digs all terrains inside the shovel circle. To use this, you'll first of all need to add the **ScriptBoy.Digable2DTerrain** namespace. Next, create a public **Shovel** variable. You can then call the **Dig()** method.

```csharp
using UnityEngine;
using ScriptBoy.Digable2DTerrain;// You'll need to include this namespace

public class Player : MonoBehaviour
{
    // This needs to be assigned to in the inspector
    public Shovel shovel;

    void Update()
    {
        // if(Pressing Enter key)
        if (Input.GetKeyDown(KeyCode.Return))
        {
            shovel.Dig();
        }
    }
}
```

shovel.Dig (New)

Declaration
```csharp
public bool Dig()
```

Description
Returns true if the shovel digs any terrain.

```csharp
if (shovel.Dig())
{
    //PlaySound();
}
```

Declaration
```csharp
public bool Dig (out float diggedArea)
```
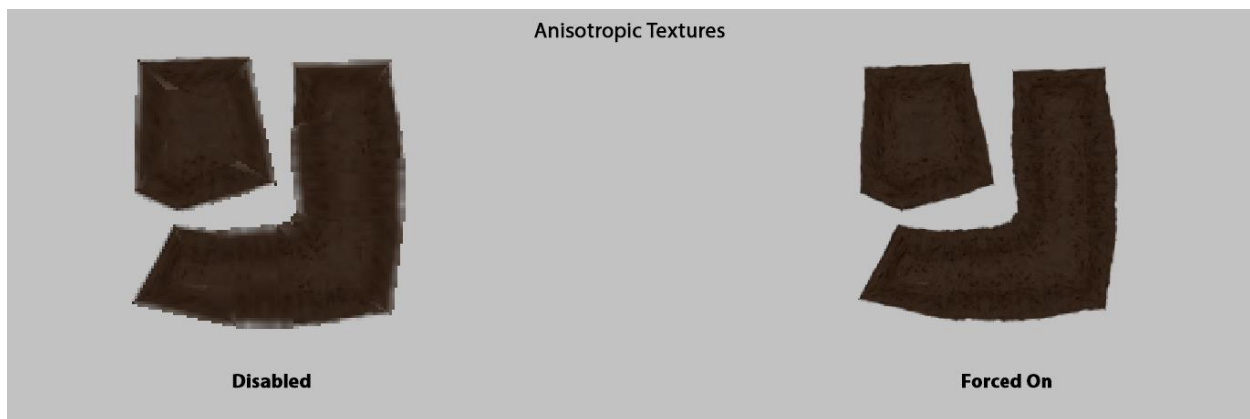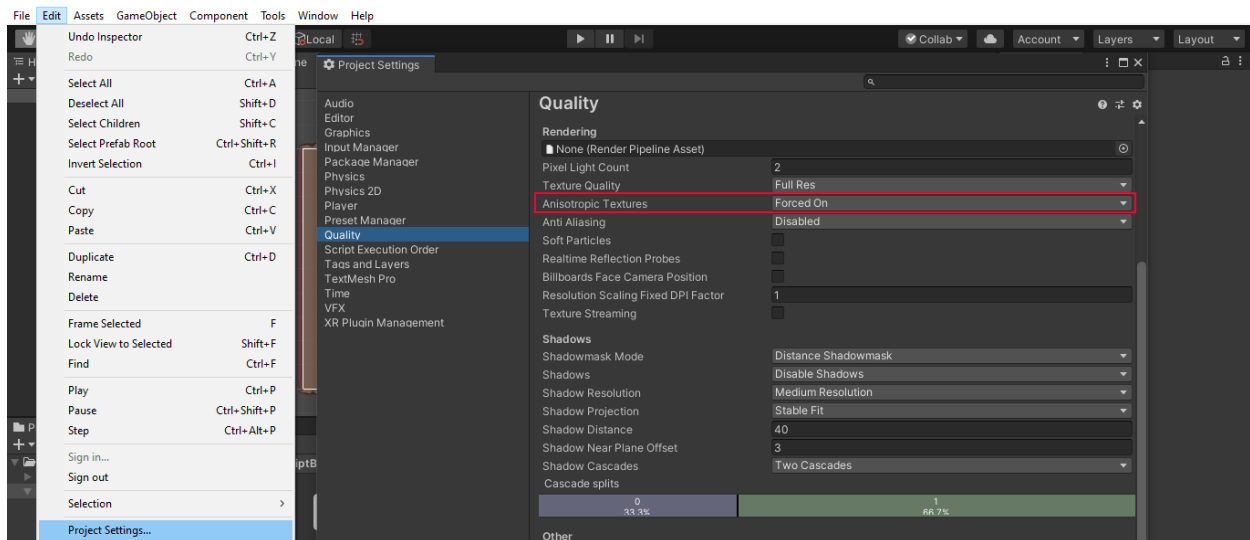
Description
Returns true if the shovel digs any terrain.
If true is returned, You can check diggedArea.

```csharp
float diggedArea;
if (shovel.Dig(out diggedArea))
{
    if (diggedArea > 0.5f)
    {
        //PlaySound();
    }
}
```
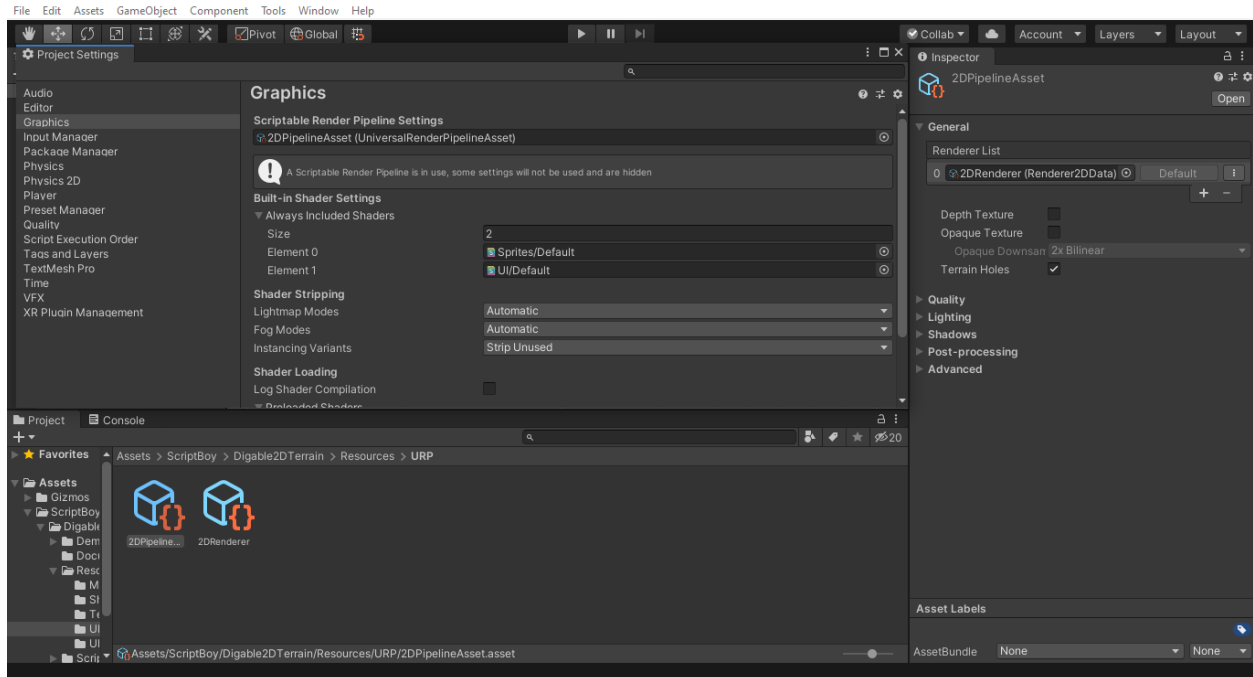

Quality Settings

Go to **Quality Settings** then set the **Anisotropic Textures** to **Forced On**.

Anisotropic Textures

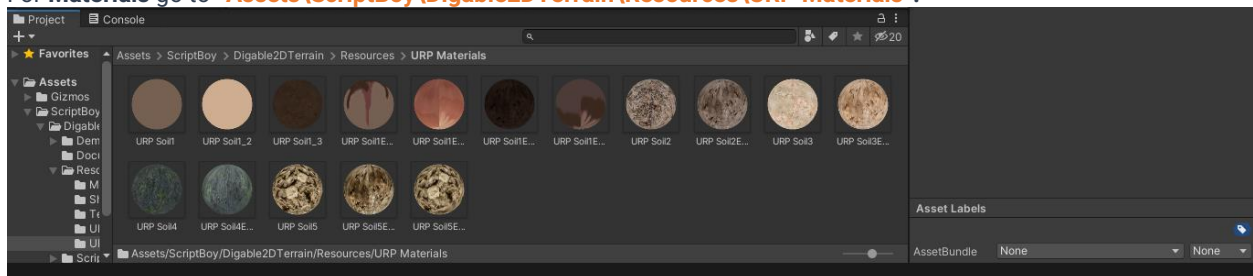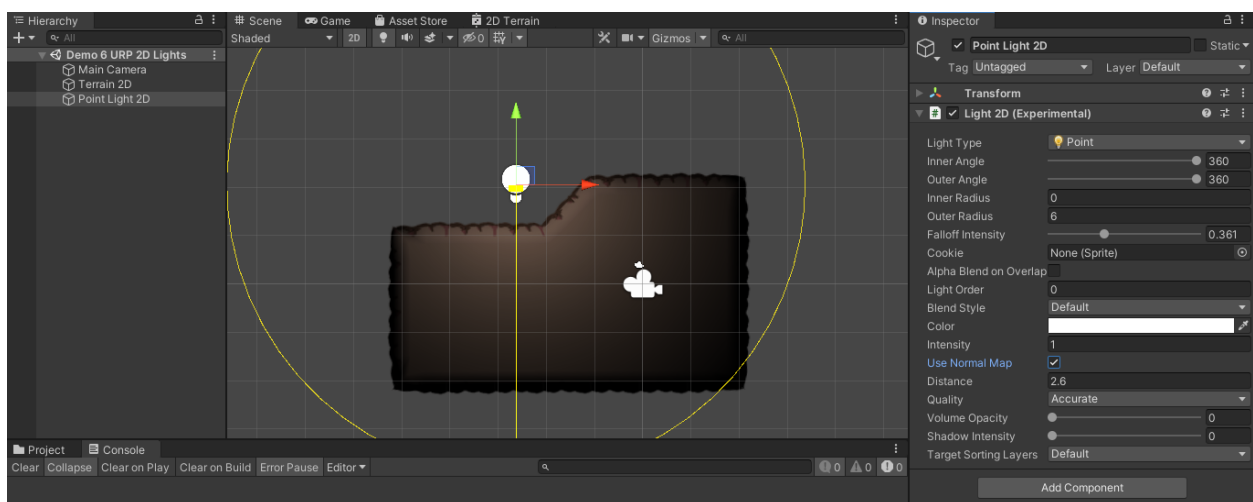Disabled   Forced On

URP 2D Lights

Go to **Graphics Settings** then set the **Render Pipeline Asset.**

For **Materials** go to **"Assets\ScriptBoy\Digable2DTerrain\Resources\URP Materials".**

You can enable **"Use Normal Map"** of your **2D Light**.

Links

Making 2D Terrain: https://youtu.be/GAP5ZuNlrDA
Using Shovel in a Script: https://youtu.be/mp9ej1Z-Euo

Gmail: scriptboy.unity@gmail.com

Good luck ☺

Script Boy