2_2_点群データを保存する

点群データを保存するクラス（PointCloudSaver）を作成する

C#

```
using System.IO;
using UnityEngine;

public class PointCloudSaver : MonoBehaviour
{
    [SerializeField]
    private PointCloudScanner pointCloudScanner;

    private static readonly string FILE_NAME = "/pointcloud.txt";

    public void Save()
    {
        var points = pointCloudScanner.Points;

        // 点群の位置情報をファイルに保存する
        var filePath = Application.persistentDataPath + FILE_NAME;
        using (var writer = File.CreateText(filePath))
        {
            foreach (var point in points)
            {
                writer.WriteLine(point.x + "," + point.y + "," + point.z);
            }
        }

        Debug.Log("Saved point cloud to " + filePath);
    }
}

```

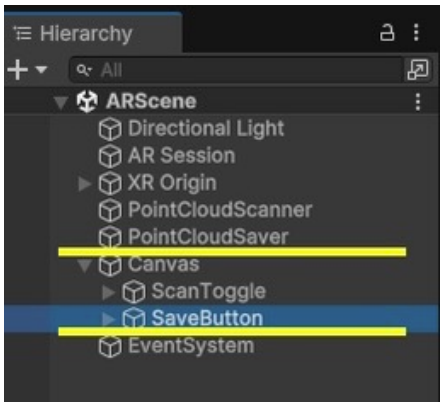
点群保存ボタン（SaveButton）を作成

C#

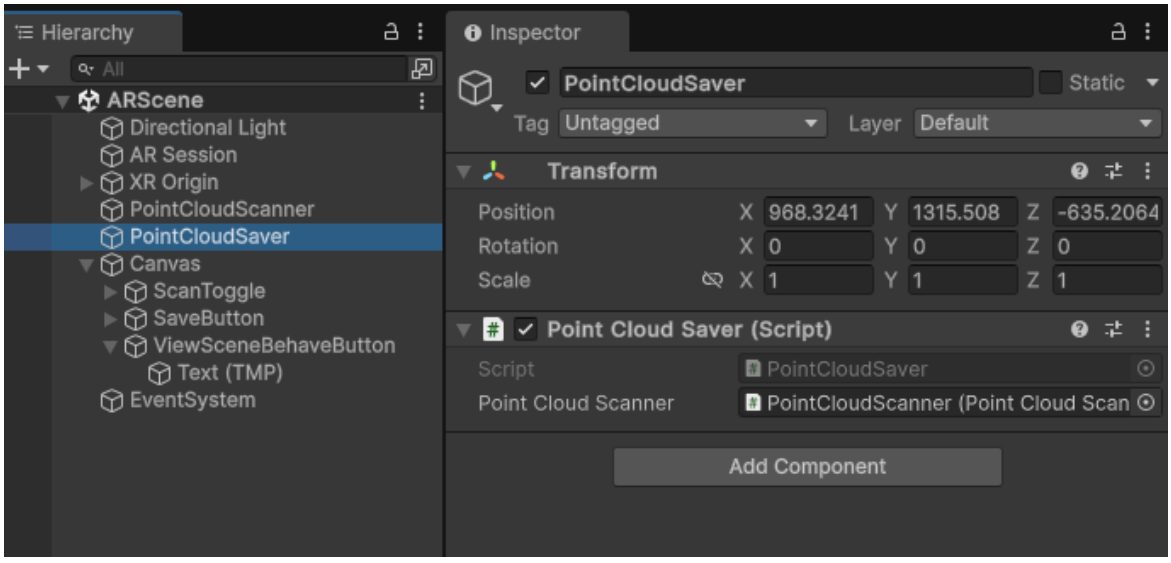
```
using UnityEngine;
using UnityEngine.UI;

public class SaveButton : MonoBehaviour
{
    [SerializeField]
    private PointCloudSaver pointCloudSaver;

    private Button button;

    private void Awake()
    {
```

```
13          button = GetComponent<Button>();
14      }
15
16      private void Start()
17      {
18          button.onClick.AddListener(OnClick);
19      }
20
21      private void OnDestroy()
22      {
23          button.onClick.RemoveListener(OnClick);
24      }
25
26      public void OnClick()
27      {
28          pointCloudSaver.Save();
29      }
30  }
31
```

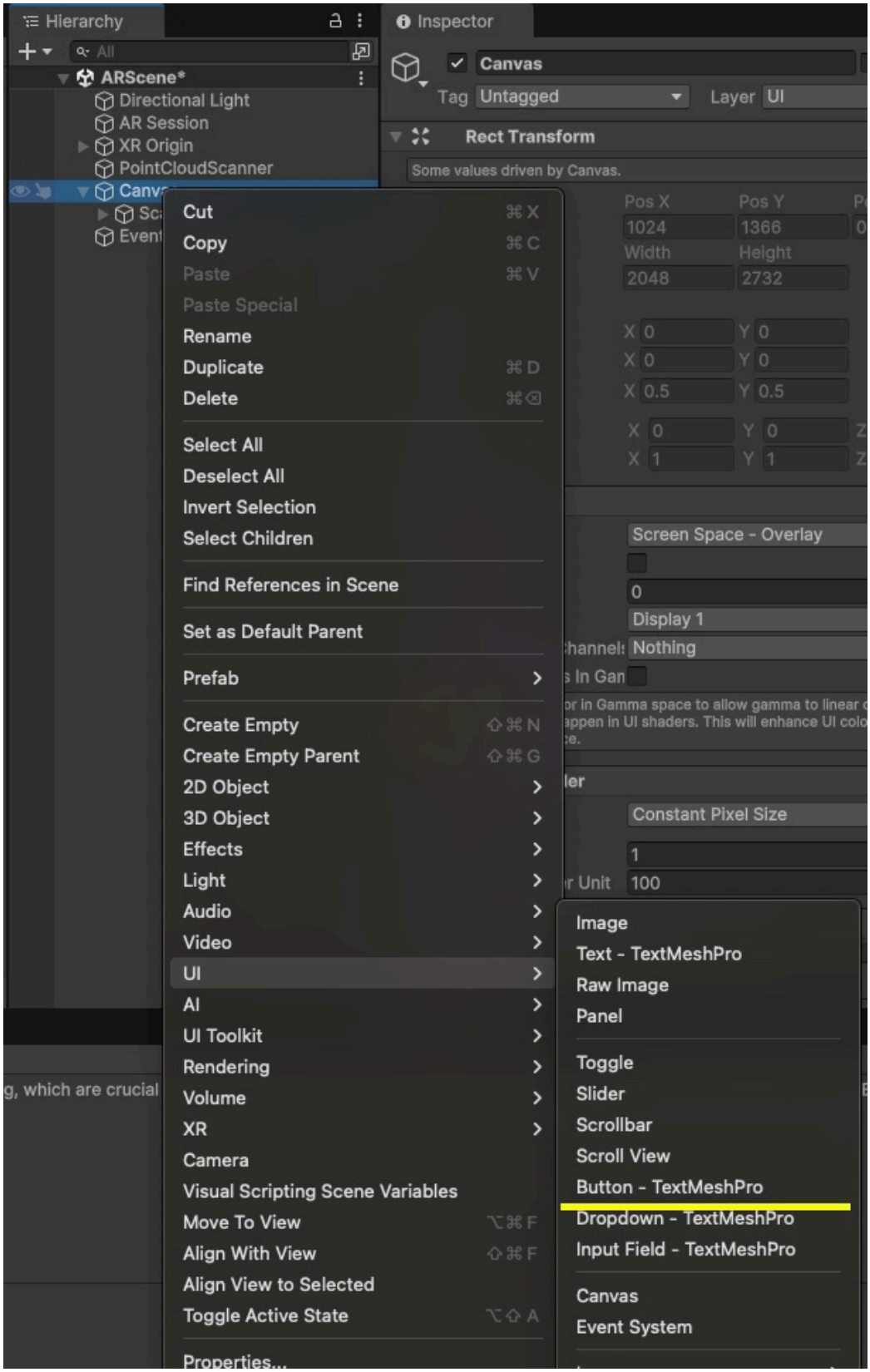
GameObjectを作成してアタッチ



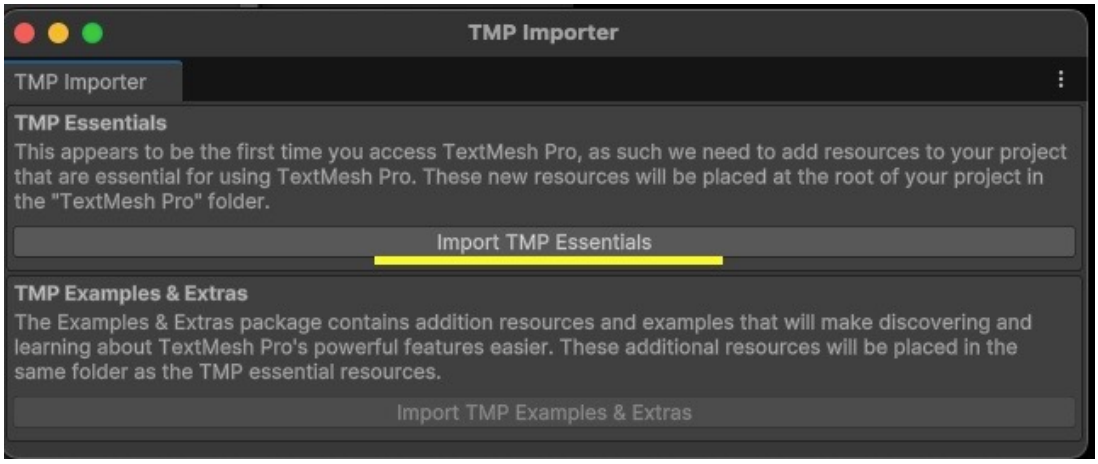
PointCloudSaver



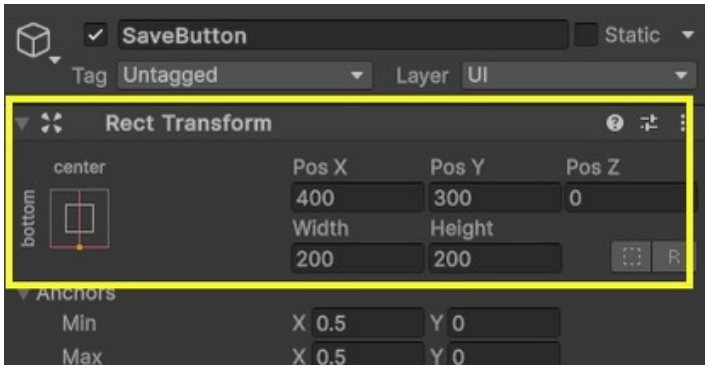
Button（TextMeshPro）を生成

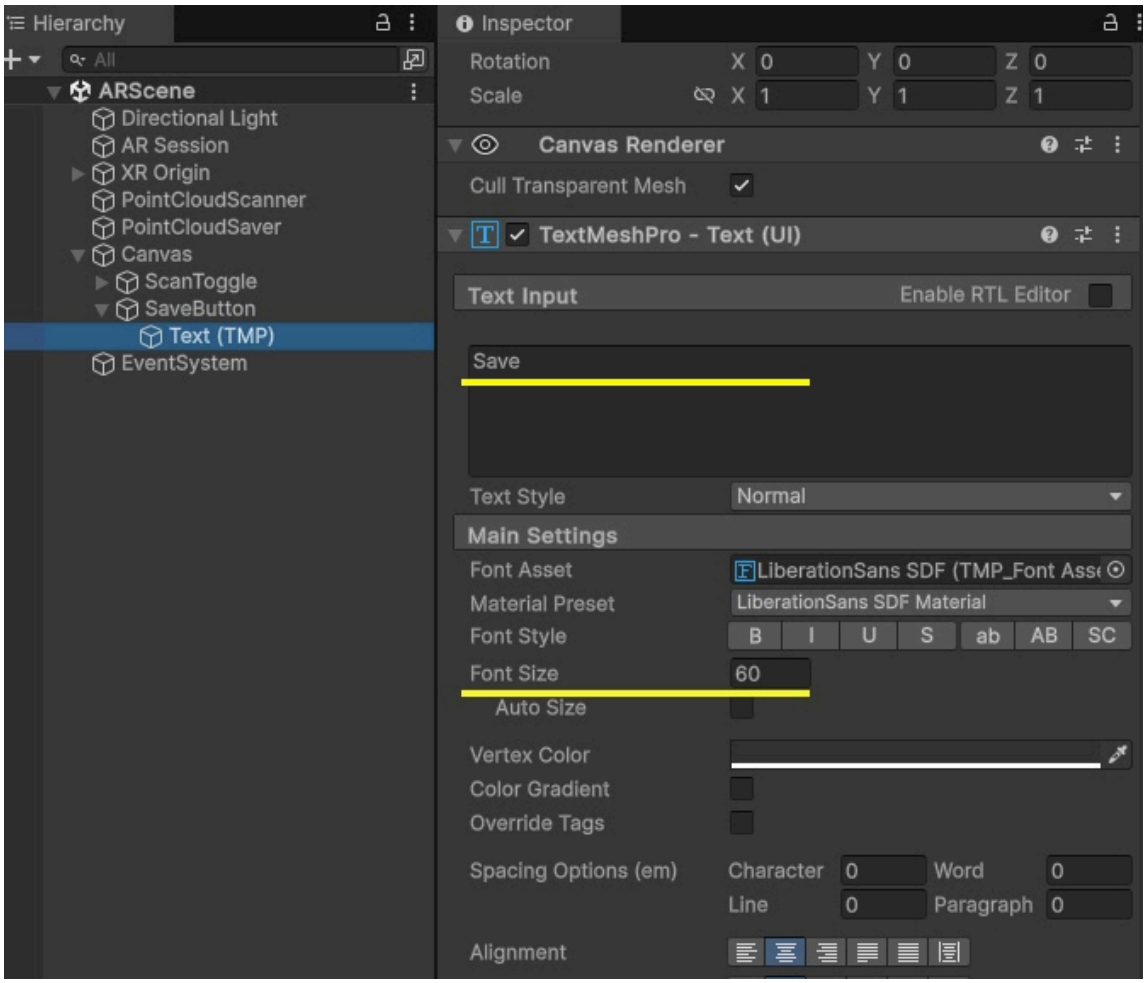


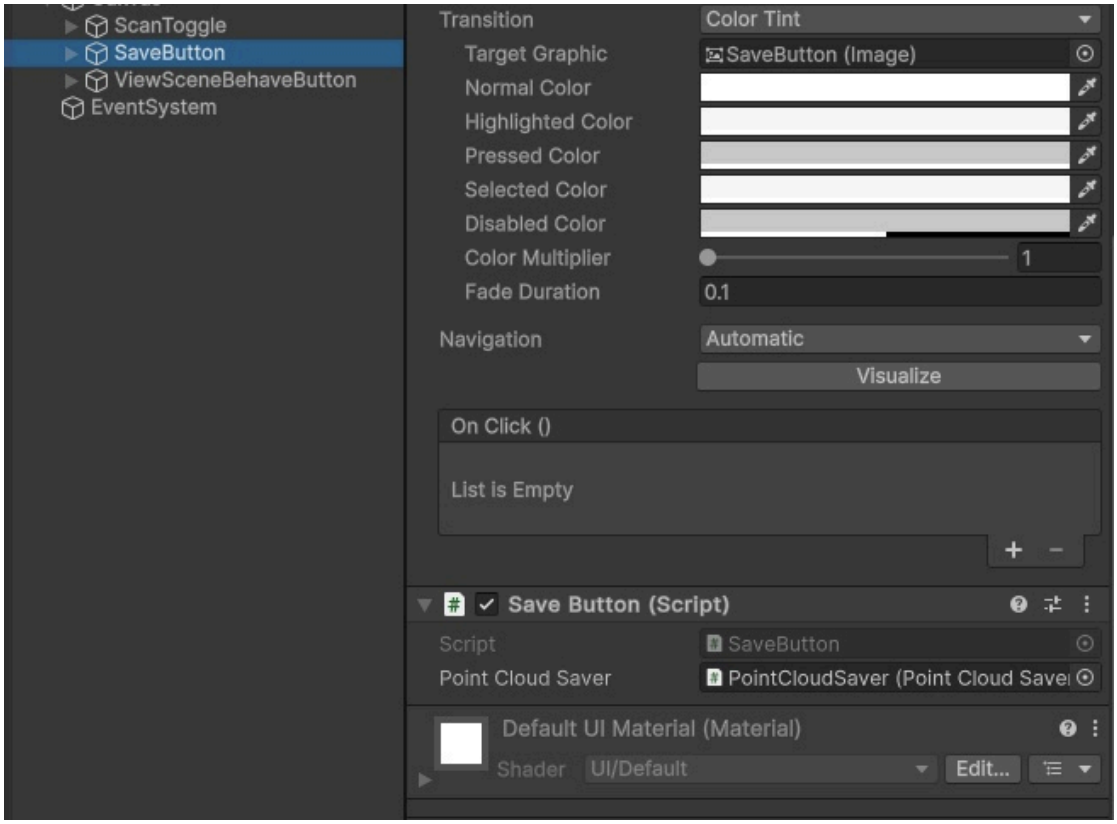
TextMeshProをインポートする（はじめて使用する場合）


TMP Importer
TMP Importer
TMP Essentials
This appears to be the first time you access TextMesh Pro, as such we need to add resources to your project that are essential for using TextMesh Pro. These new resources will be placed at the root of your project in the "TextMesh Pro" folder.
Import TMP Essentials
TMP Examples & Extras
The Examples & Extras package contains addition resources and examples that will make discovering and learning about TextMesh Pro's powerful features easier. These additional resources will be placed in the same folder as the TMP essential resources.
Import TMP Examples & Extras

SaveButton


SaveButton
Static
Tag Untagged
Layer UI
Rect Transform
center
bottom
Pos X
Pos Y
Pos Z
400
300
0
Width
Height
200
200
Anchors
Min X 0.5 Y 0
Max X 0.5 Y 0


Hierarchy
All
ARScene
Directional Light
AR Session
XR Origin
PointCloudScanner
PointCloudSaver
Canvas
ScanToggle
SaveButton
Text (TMP)
EventSystem
Inspector
Rotation X 0 Y 0 Z 0
Scale X 1 Y 1 Z 1
Canvas Renderer
Cull Transparent Mesh
TextMeshPro - Text (UI)
Text Input
Enable RTL Editor
Save
Text Style
Normal
Main Settings
Font Asset
LiberationSans SDF (TMP_Font Ass
Material Preset
LiberationSans SDF Material
Font Style
B I U S ab AB SC
Font Size
60
Auto Size
Vertex Color
Color Gradient
Override Tags
Spacing Options (em)
Character 0
Word 0
Line 0
Paragraph 0
Alignment



XR SimulationでEditor上で実行する

- 保存ファイルがあることを確認（ファイルパスのログを参照）