

Fabian's notes:

UNITY3D and Point Cloud / Oculus Integration

Download the Scanse Sweep Unity3D application files:

<https://github.com/scanse/sweep-3d-scanner-unity-viewer>

Getting Started with Oculus in Unity3D

<https://developer.oculus.com/documentation/unity/latest/concepts/book-unity-gsg/>

Download the Oculus Rift Setup tool:

<https://www3.oculus.com/en-us/setup/>

Building Rift Applications:

<https://developer.oculus.com/documentation/unity/latest/concepts/unity-build-pc/>

Oculus Utilities for Unity

<https://developer.oculus.com/downloads/unity/>

Modifications to the Scanse Sweep Unity 3D project scripts:

In the PointCloud.cs script:

Set colors of points:

```
colors[i] = new Color(0.0f, 1.0f, 0.0f, 0.0f) // green in RGBA color space
```

In the PointCloudGenerator.cs script

Open file directly (without file browser – e.g. for Mac OSX application):

Commentout this section:

```
// Open a native file dialog, so the user can specify the file location  
/*  
SFB.ExtensionFilter[] extensions = new[] { new ExtensionFilter("Point Cloud Files", "csv", "ply") };  
string[] paths = StandaloneFileBrowser.OpenFilePanel("Open File", "", extensions, false);  
if (paths.Length < 1)  
{  
print("Error: Please specify a properly formatted CSV or binary PLY file.");  
Application.Quit();  
return;  
}  
*/
```

Setup filePath variable:

```
string filePath = "Fabian_classroom_scan_2Hz_500Hz.csv";
```

comment out

```
//string filePath = paths[0];
```

Use the OVRPlayer controller (better Xbox controller integration)

Set background color to black (rather than skybox):

OVRPlayerController > OVRCameraRig > LeftEyeAnchor:

Camera Clear Flags: Solid Color, Background: black (color Picker)

Do also for CenterEyeAnchor and RightEyeAnchor