

Google Street View App

Google's updated app now supports Cardboard, meaning we can take a virtual tour of just about anywhere.

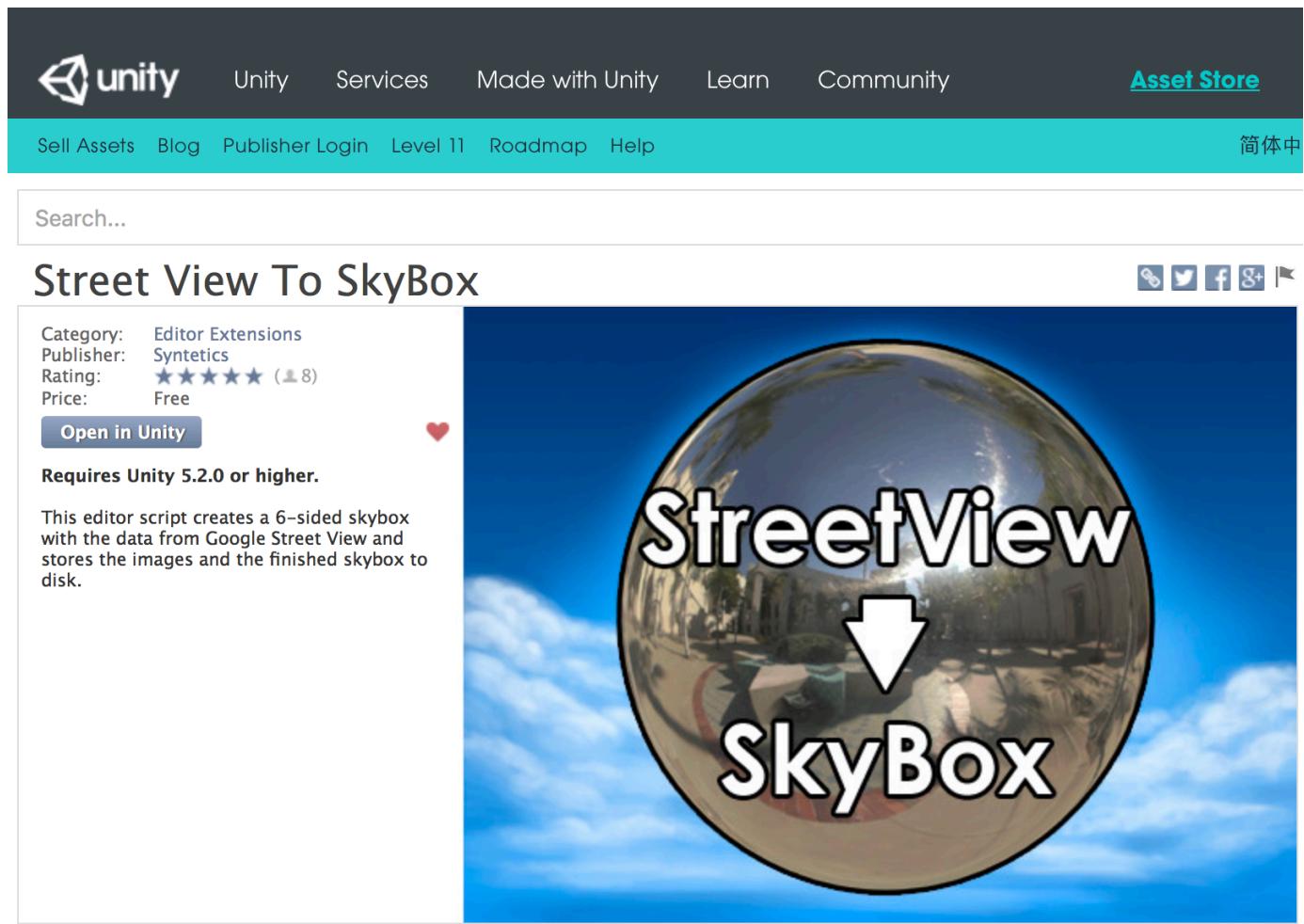
Cardboard, of course, is the cheap virtual-reality headset that works with smartphone. And Street View is the mobile version of Google's ground-level Maps feature. Put the two together and presto:

Now we get a virtual-reality view of anywhere we want to visit in Street View.

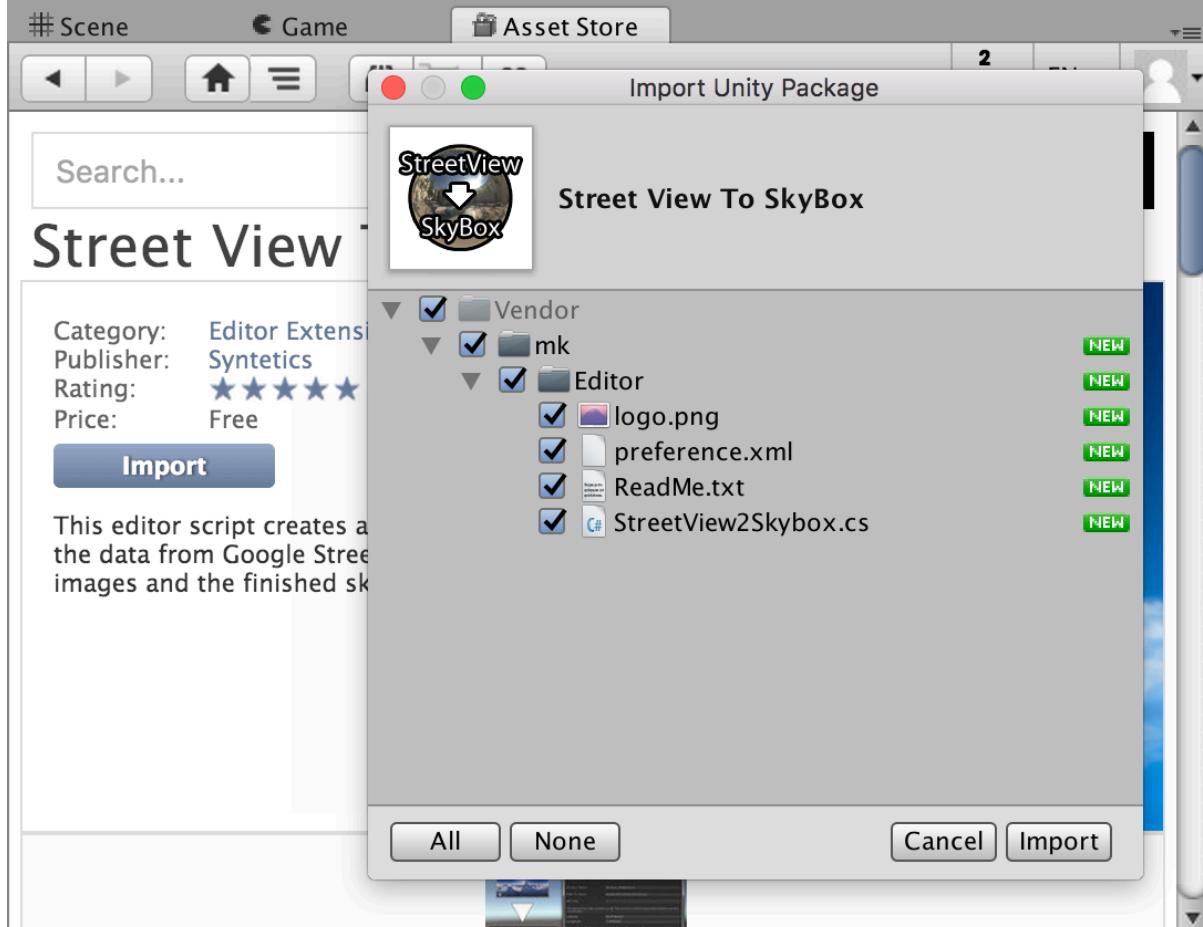
Street View to Skybox

Download and import package of Street View to Skybox , ([having Problems](#))

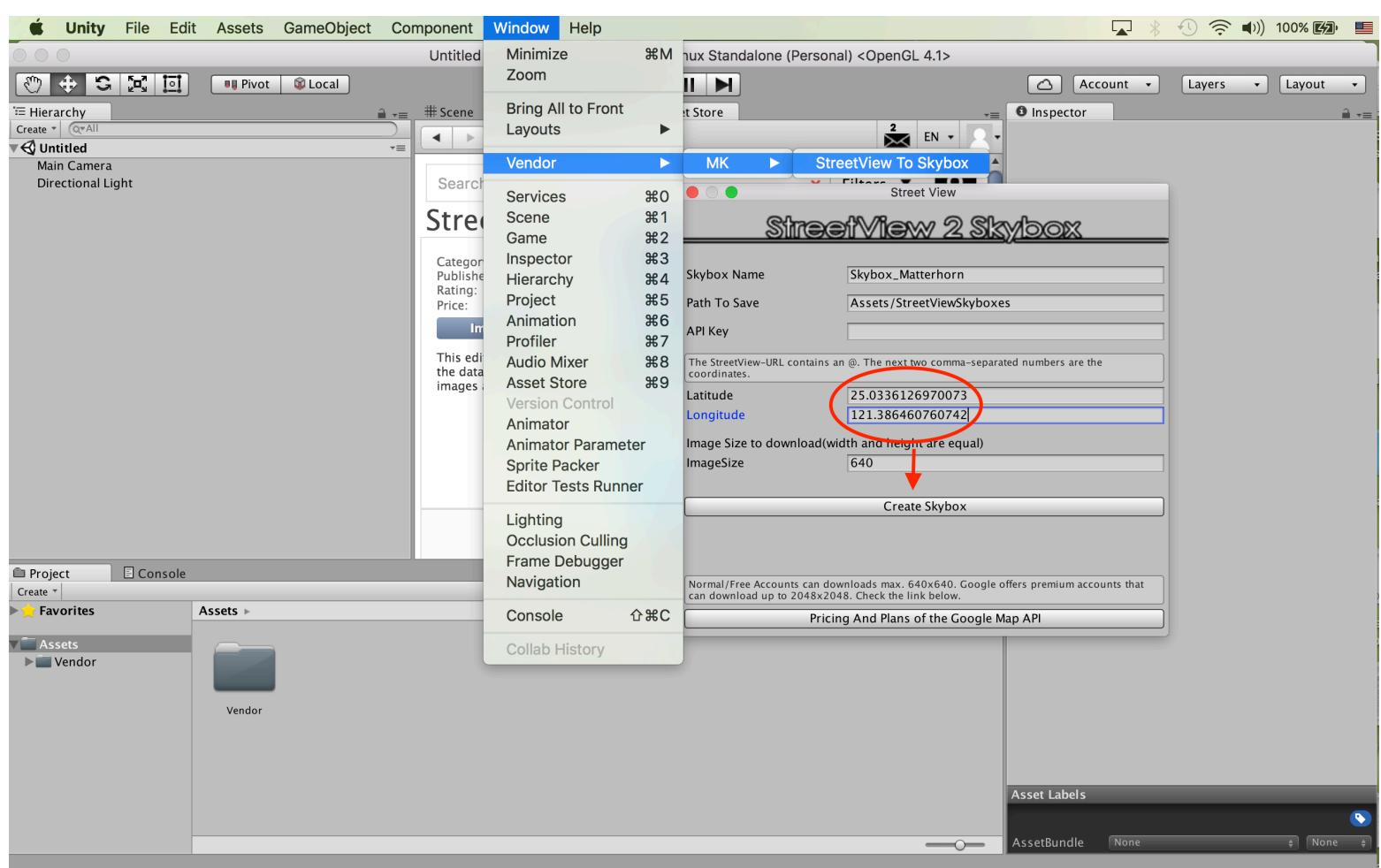
1. Find it and open in Unity



2. Login unity and import it:



3. Select [Window]->[Vendor]->[Mk]->[StreetView To Skybox] input the latitude/longitude of center, found from [address](http://diffusion.cgu.edu.tw/2014/computer/2014-2/GPSCoord-4.html) (<http://diffusion.cgu.edu.tw/2014/computer/2014-2/GPSCoord-4.html>) and create the skybox:

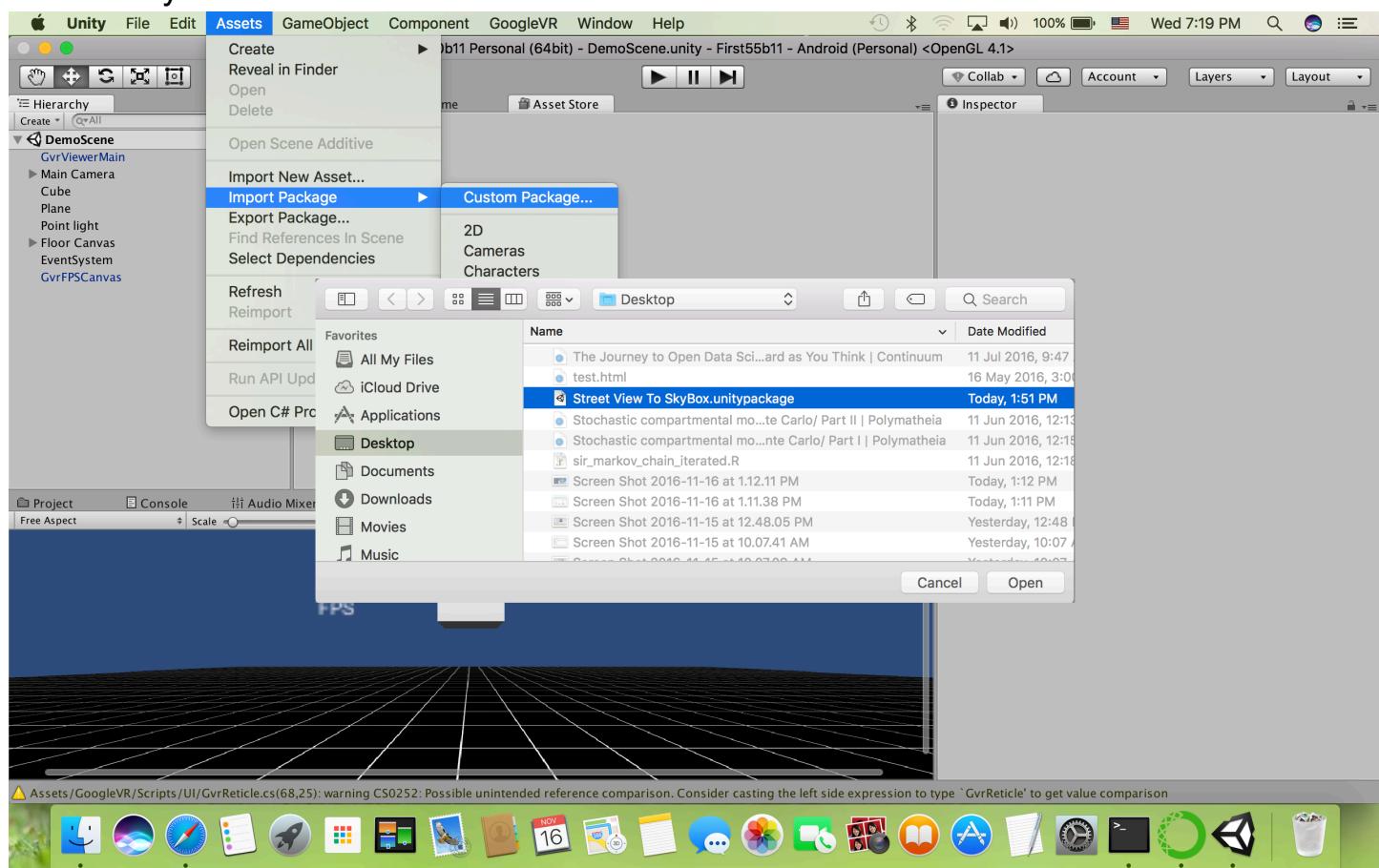


Note

- While updated to last Unity 5.5.0b11, the unit package can not be download again. Find the download package from

[user/Library/Unity/Asset Store-5.x/Syntetics/Extensions/Street View To SkyBox.unitypackage]

and import from unity main menu:



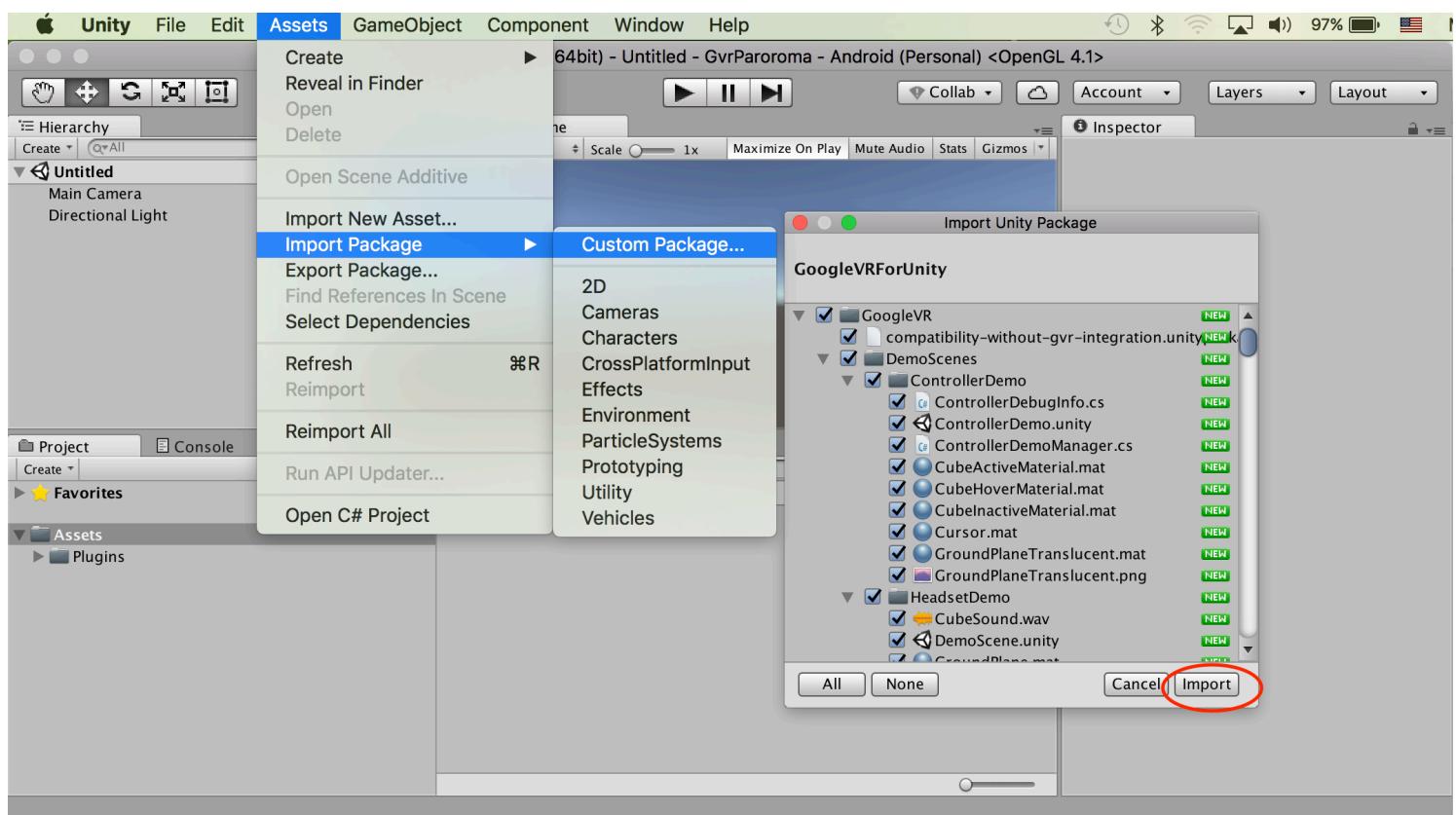
- but Unity-5.5f1 works normally again.

4. import the CardboardSDK (v 1.0.3) for Unity package by going to:

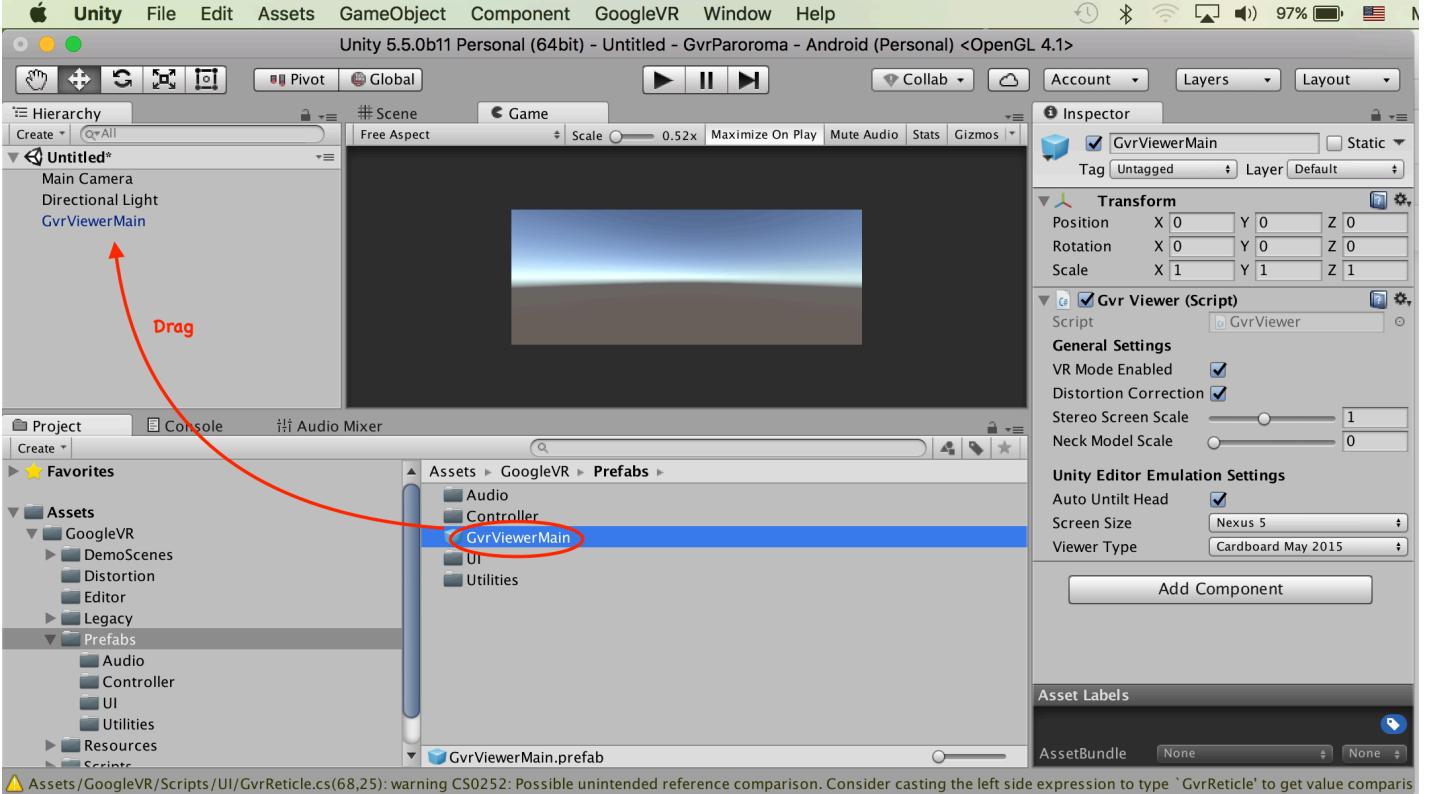
- **Assests > Import Package > Custom Package**

select the Google Unity Plugin:

- GoogleVRForUnity.unitypackage
- ~~CardboardSDKForUnity.unitypackage (pre 0.8)~~ and
- ~~CardboardDemoForUnity.unitypackage (pre 0.8)~~;

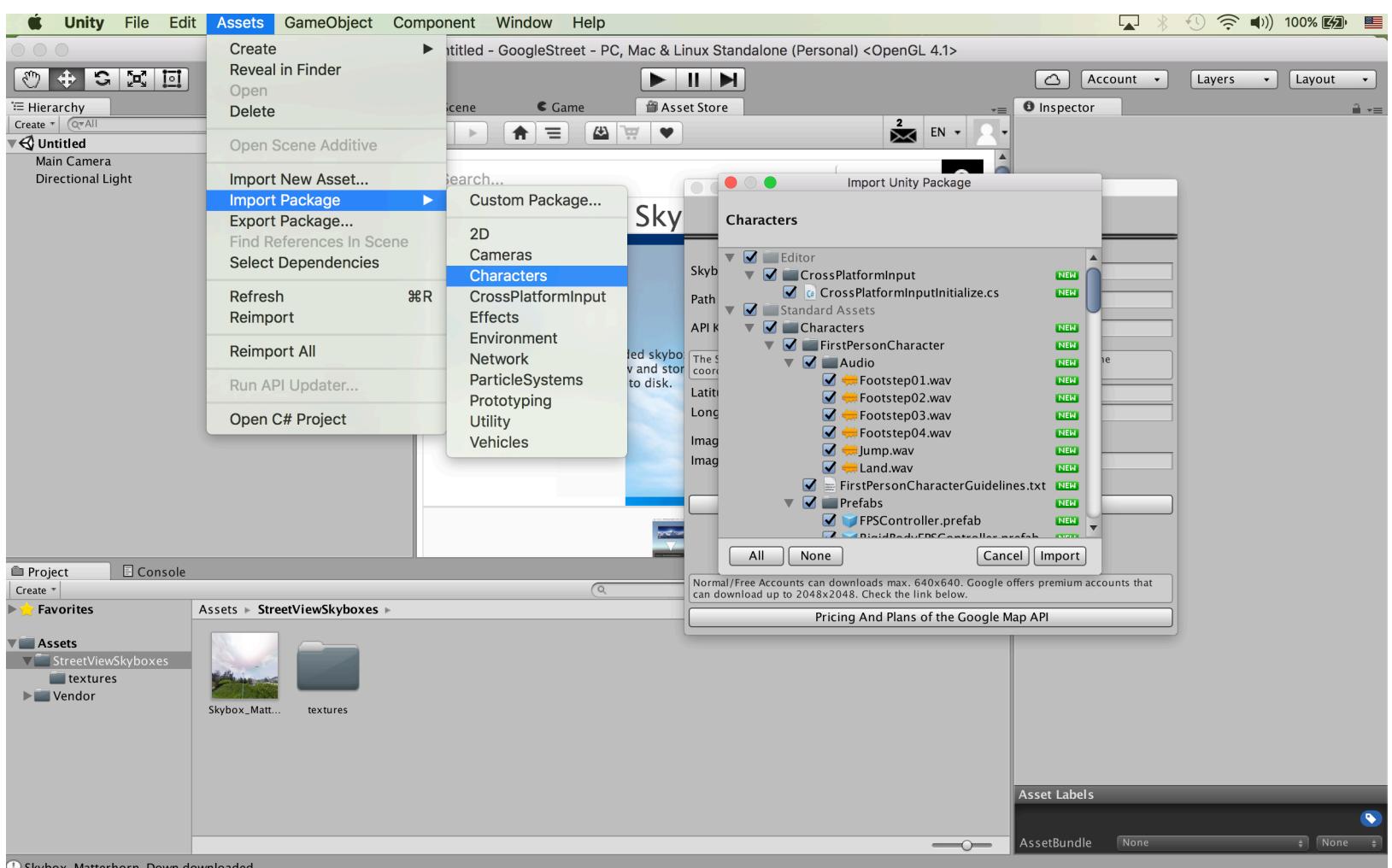


- Open the **GoogleVR/Prefabs** folder. Drag CardboardMain.prefabs into the **Hierarchy Windows**

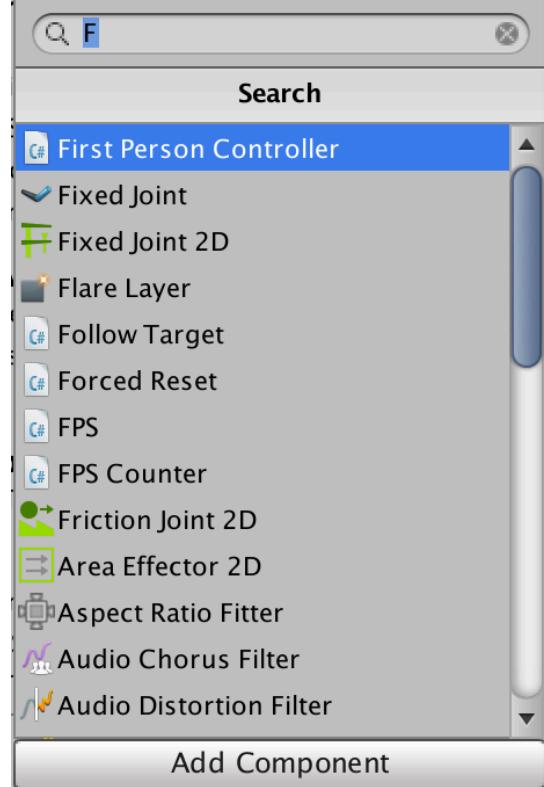


If nothing option was found in last step, drag Standard Assets into [Project] Assets.

5. Import package from [Assets]->[Import package]->[Characters] and

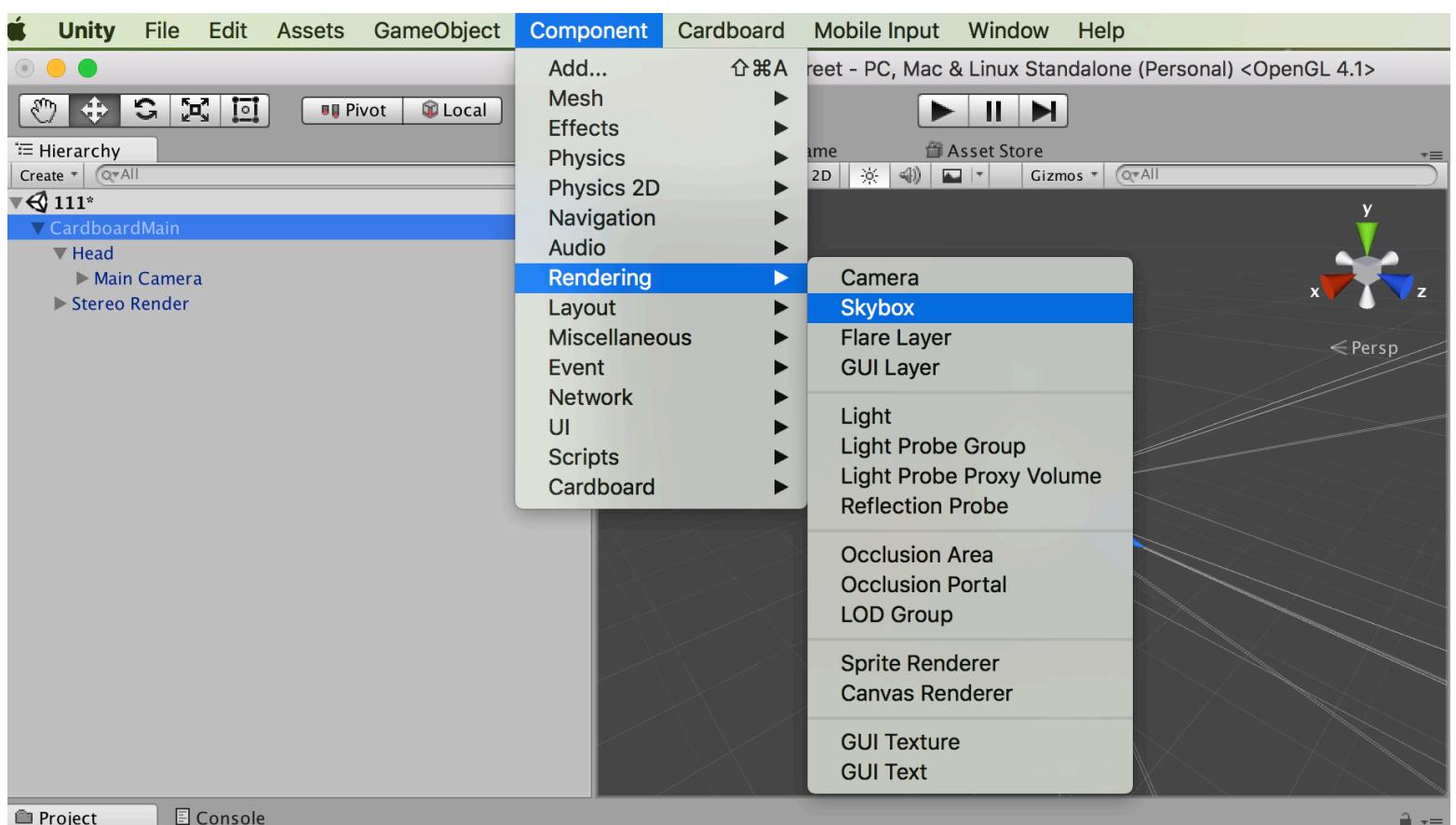


5. From right column, add component, [First Person Controller], for CardboardMain in Hierarchy Windows:

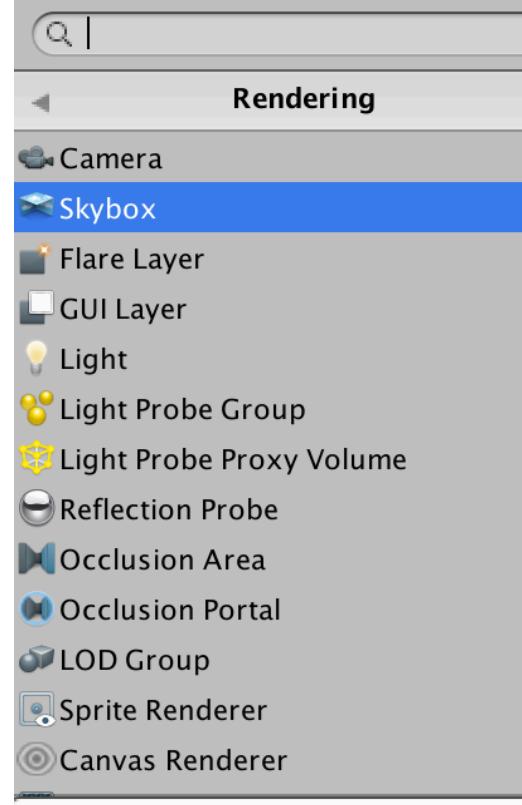


Skybox

1. Add Skybox by [Component]->[Rendering]->[Skybox]



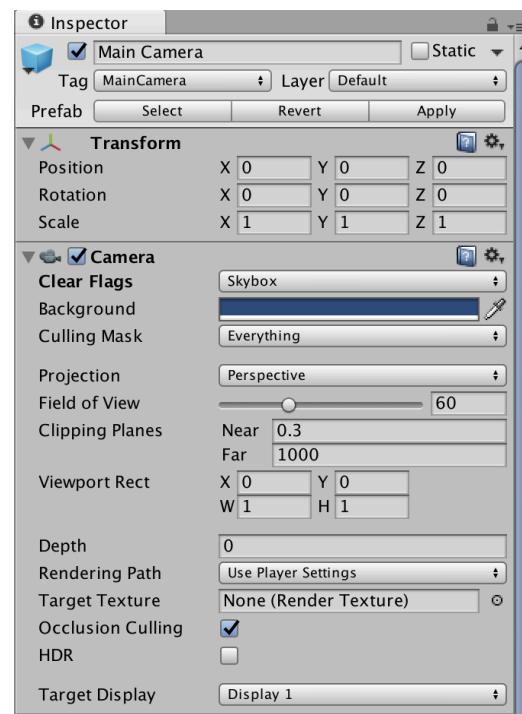
2. In **Inspector Windows**, [Add Component] for CardboardMain -> Main Camera in **Hierarchy Windows**,



also change the property of Skybox,



and the property of clear flags to Skybox in Camera,

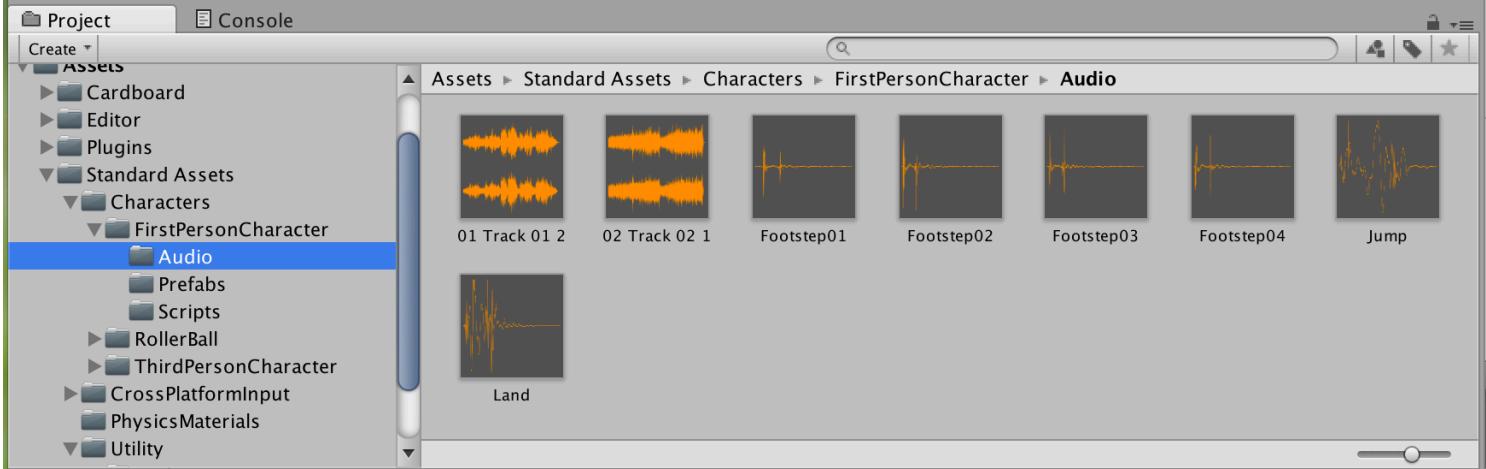


Now we can test it or build the app.

Note

1. Sound Effect:

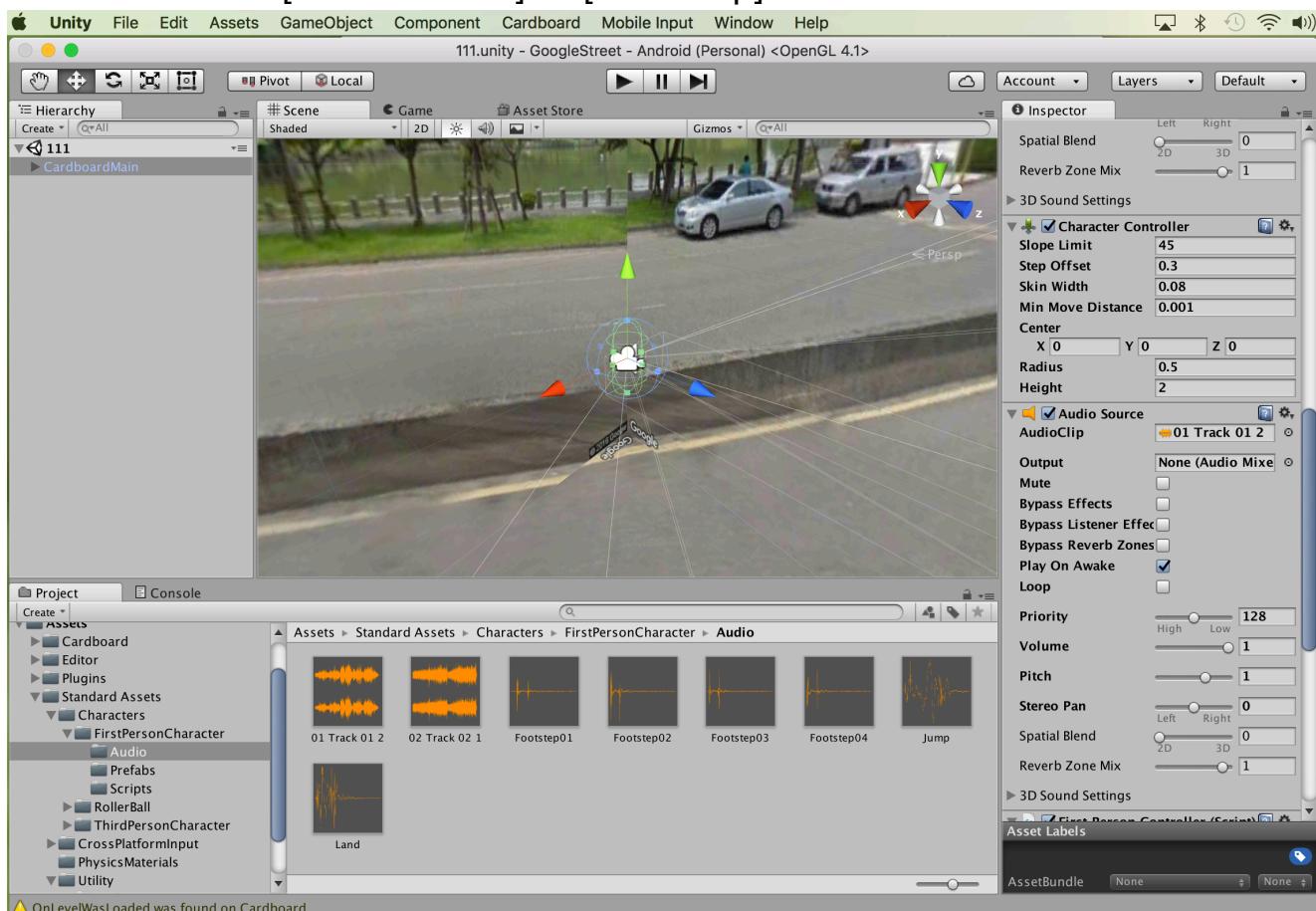
- add the sound file by importing [new Asset] or dragging the file into certain folder:



- Add Sound for CardboardMain, [Add Component] -> [Audio] -> [Audio Source]:



- Drag the sound asset into [Audio Source] -> [AudioClip]:



2. UI: to test the app, (Apple Case):

- hold [control] key to rotate the scene;
- hold [option] key to look around.

3. HTML/Javascript codes to get latitude/logitude of position:

```
<!doctype html>
<html lang="en">
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, minimum-scale=1, initial-scale=1, user-scalable=no">
    <title></title>
    <script type="text/javascript"
        src="http://maps.google.com/maps/api/js?sensor=true&v=3&libraries=geometry"></script>
</head>

<body>

    <div id="map_canvas" style="width: 600px; height: 500px;"></div>
    <br />
    <label for="latitude">Latitude (緯度):</label>
    <input id="latitude" type="text" value="" />
    <label for="longitude">Longitude (經度):</label>
    <input id="longitude" type="text" value="" />

    <br>
    <!--
    <label>
        The distance from Chang-Gung University to Destination: <div id="distanceAB"></div>
    <label>
        -->
<script type="text/javascript">
    var myZoom = 16;
    var myMarkerIsDraggable = true;
    var myCoordsLenght = 12;
    var defaultLat = 25.01743594338596;
    var defaultLng = 121.540956;
    var loc1 = new google.maps.LatLng(25.033515487308918, 121.386525133759);
    var loc2 = new google.maps.LatLng(25.033515487308918, 121.386525133759);

    function initialize() {
        var mapOptions = {
            center: new google.maps.LatLng(defaultLat, defaultLng),
            zoom: myZoom,
            mapTypeId: google.maps.MapTypeId.ROADP
        };
        var map = new google.maps.Map(document.getElementById("map_canvas")
, mapOptions);
```

```

// creates a draggable marker to the given coords
var myMarker = new google.maps.Marker({
    position: new google.maps.LatLng(defaultLat, defaultLng),
    draggable: myMarkerIsDraggable
});

google.maps.event.addListener(myMarker, 'dragend', function(evt){
    var newLat=evt.latLng.lat();
    var newLng=evt.latLng.lng().toFixed(myCoordsLength);
    document.getElementById('latitude').value = newLat;
    document.getElementById('longitude').value = newLng;
    var loc2 = new google.maps.LatLng(newLat, newLng);
});

// centers the map on markers coords
map.setCenter(myMarker.position);

// adds the marker on the map
myMarker.setMap(map);
}

google.maps.event.addDomListener(window, 'load', initialize);
</script>

</body>
</html>

```

In [1]:

```
!jupyter nbconvert Unity-Google-Street-View-2.ipynb
```

```
[NbConvertApp] Converting notebook Unity-Google-Street-View-2.ipynb
to html
[NbConvertApp] Writing 265613 bytes to Unity-Google-Street-View-2.html
```

In []: