

## **Maps Guide (Free-H and Studio)**

### **Wogrim's Brief Guide to Creating Maps with KK Modding Tools**

#### Before Reading This Guide

If you don't know basic mod composition and workflow, you will be lost in the sauce. You should be very comfortable with making unskinned Studio Item mods in KK Modding Tools before attempting maps. Also, maps need more general Unity knowledge for things like colliders and lighting, which you may have to search for more information about.

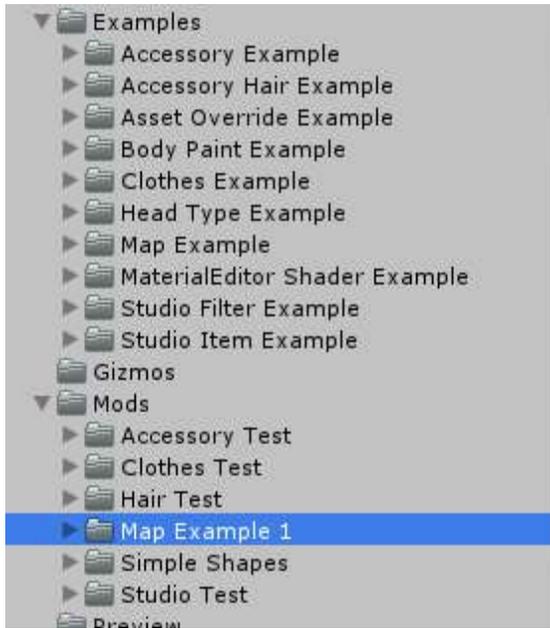
#### What Are We Making?

We are getting a copy of the KK Modding Tools example map (with some changes) to mostly work (you'll see a problem at the end).

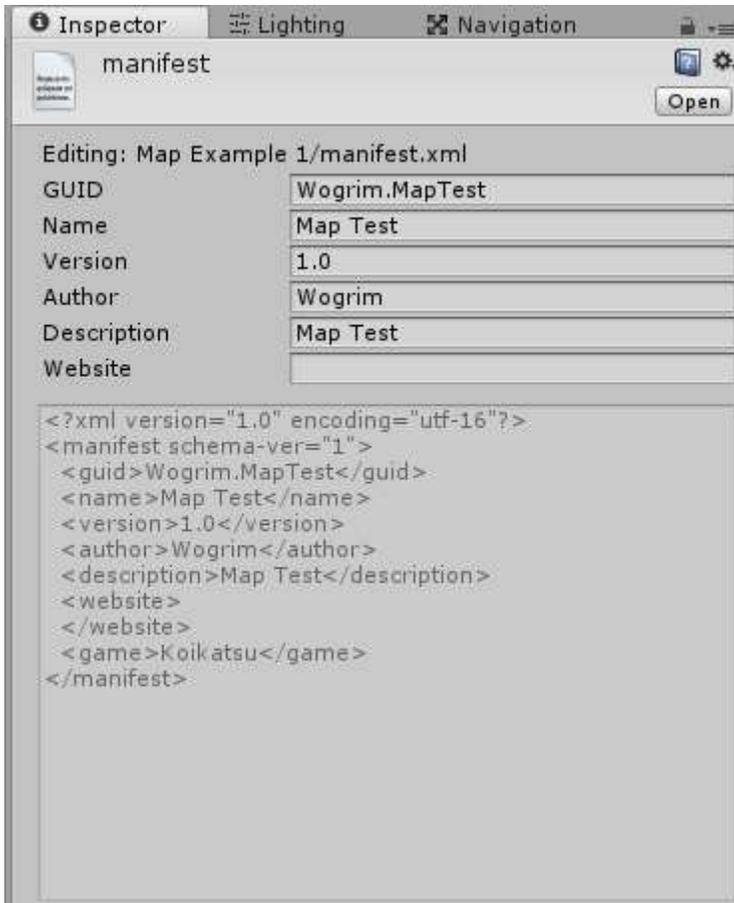
I am not a map maker; this guide is not perfect, but it should save you some trouble getting started.

## Making a Copy of the Example Map

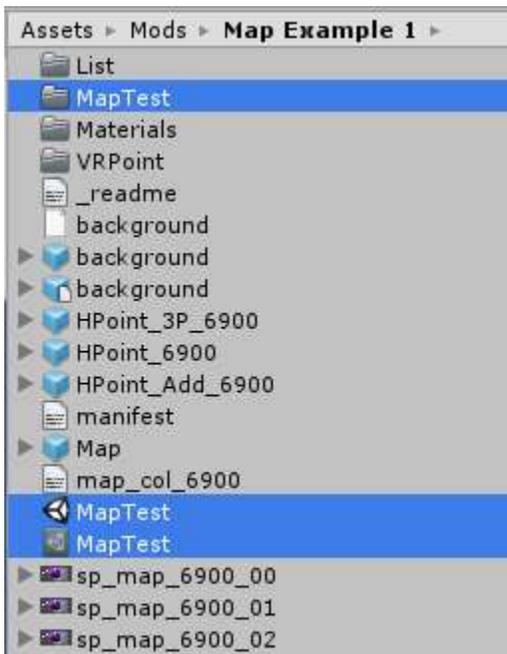
Duplicate map example folder (Ctrl+D) and move to Mods folder.



Fill out manifest.



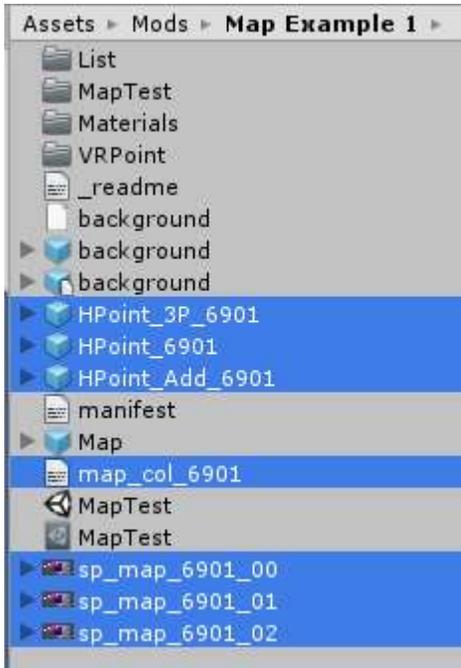
Change everywhere it says "PurpleRoom" to what you want the map called.



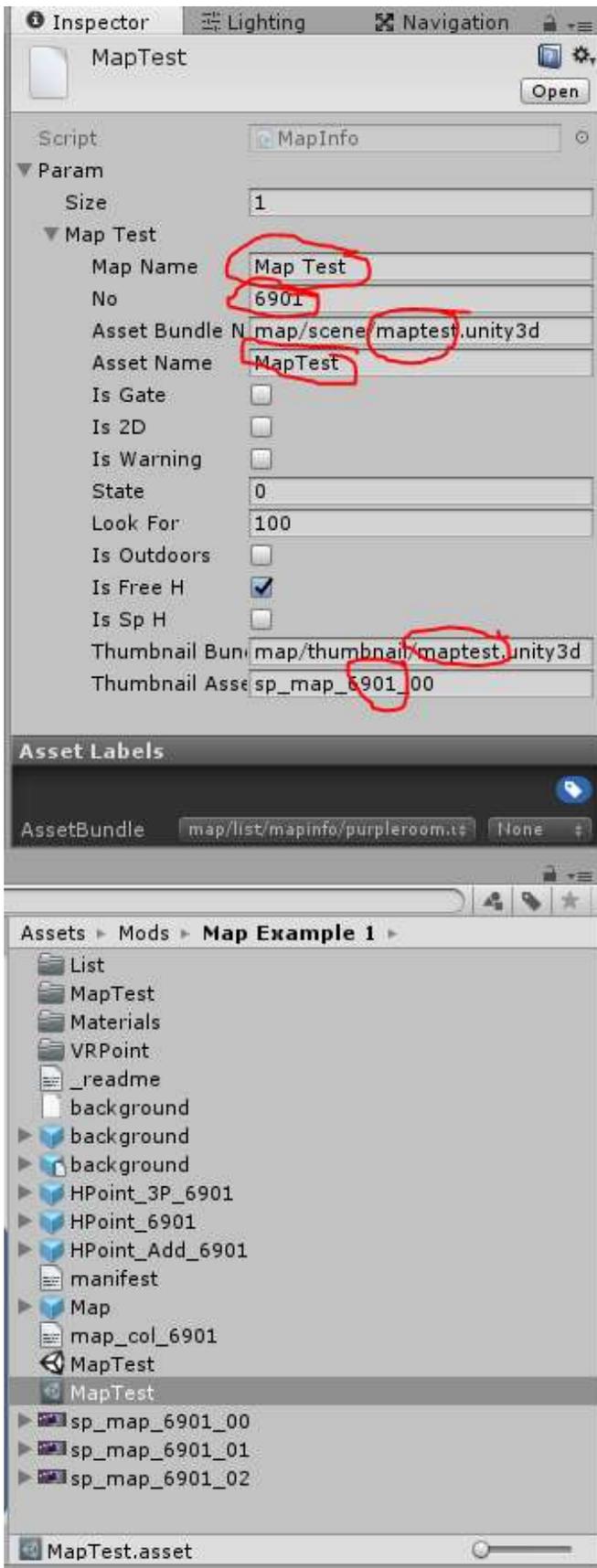
Change stuff in the list file.

	A	B	C	D	E	F	G
1	Map Colliders						
2	ID	Name	Bundle Path	File Path	Manifest	Bundle Path	File Path
3	6901	Map Test	map/scene/maptest.unity3d	MapTest		h/list/	map_col_6901

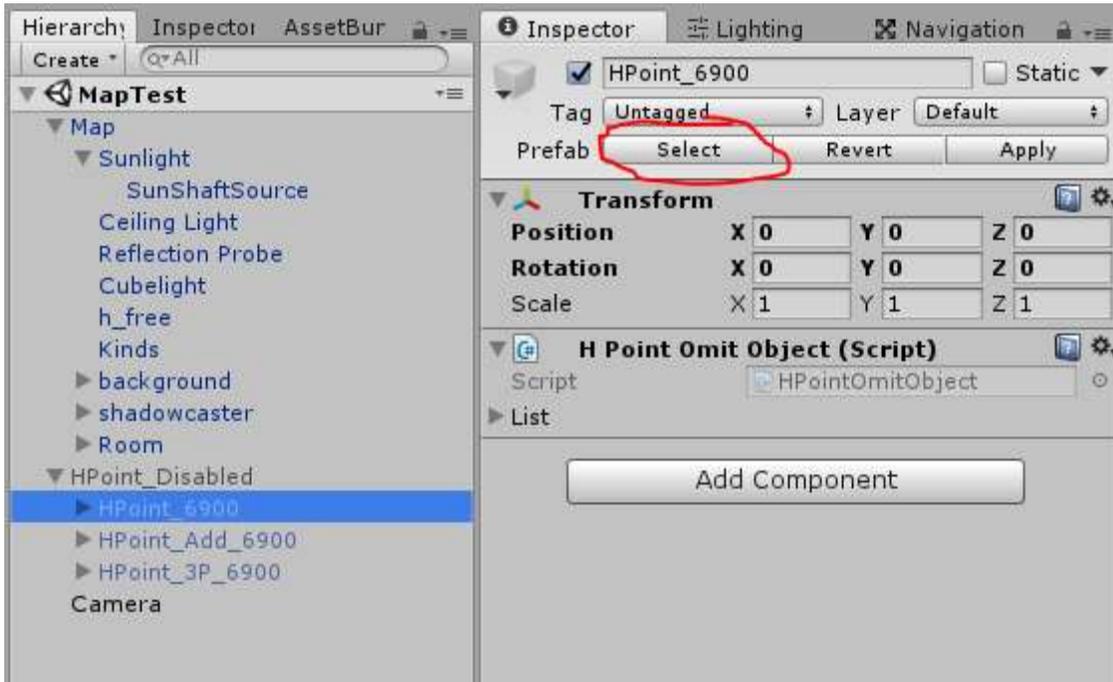
Rename things with 6900 to whatever you changed the ID in the list file to (6901 in my case), but just delete the stuff in the VRPoint folder (will be generated later).

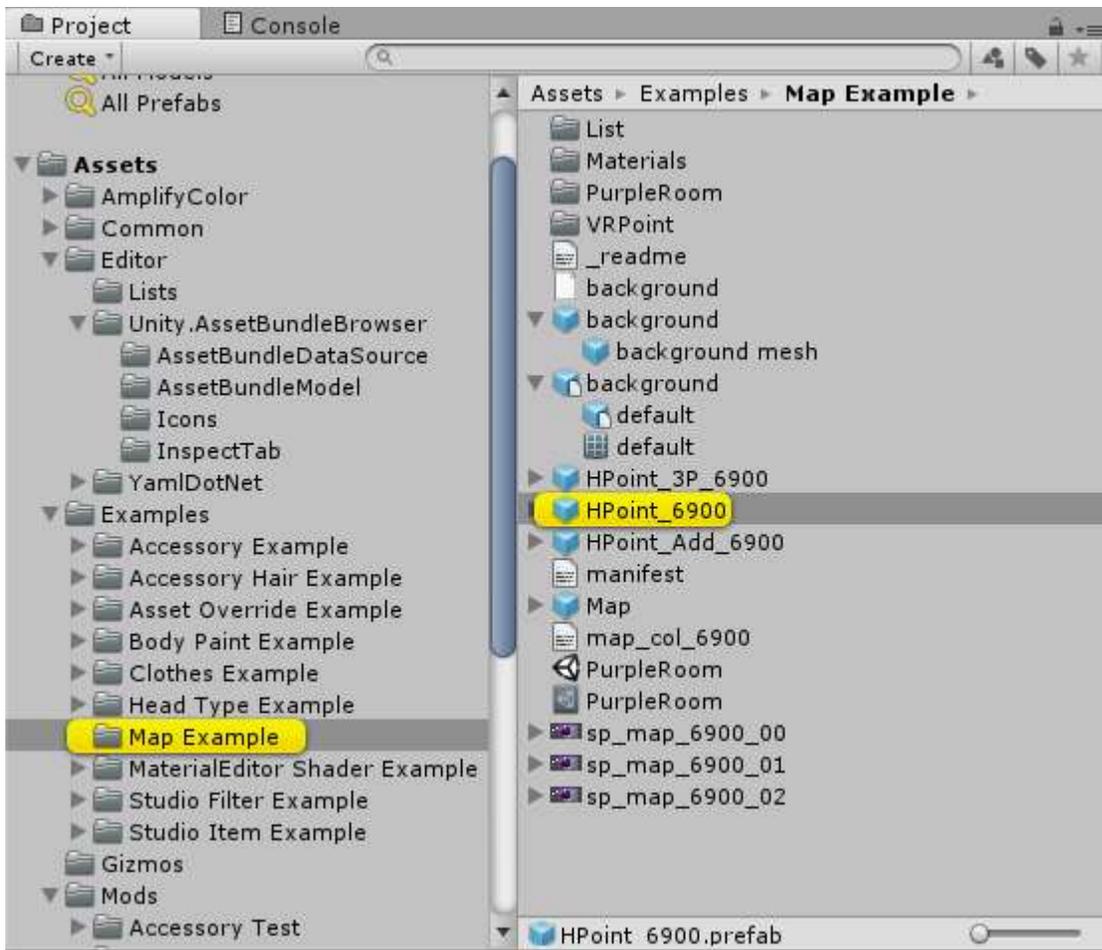


Fill in the MapInfo asset.

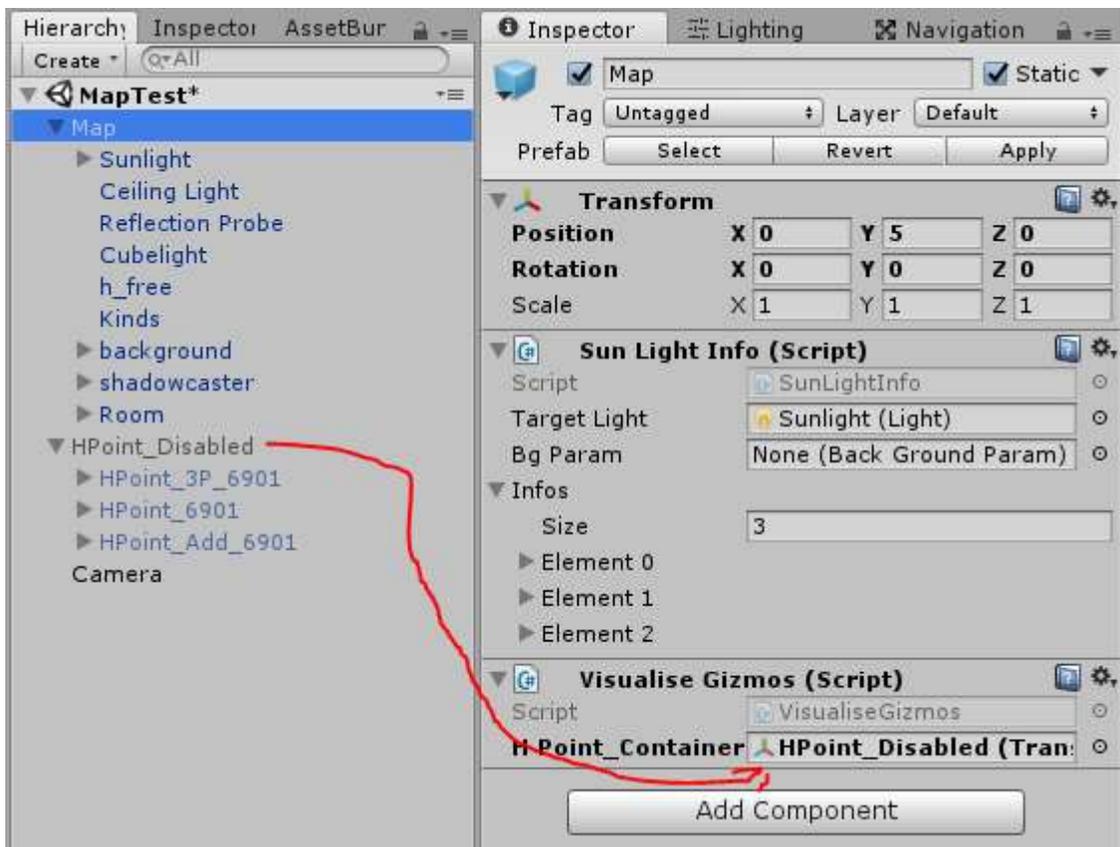


Open the scene. Things with a blue name in the hierarchy are prefab instances. If you click Select in the Inspector, it shows you where the prefab asset is.



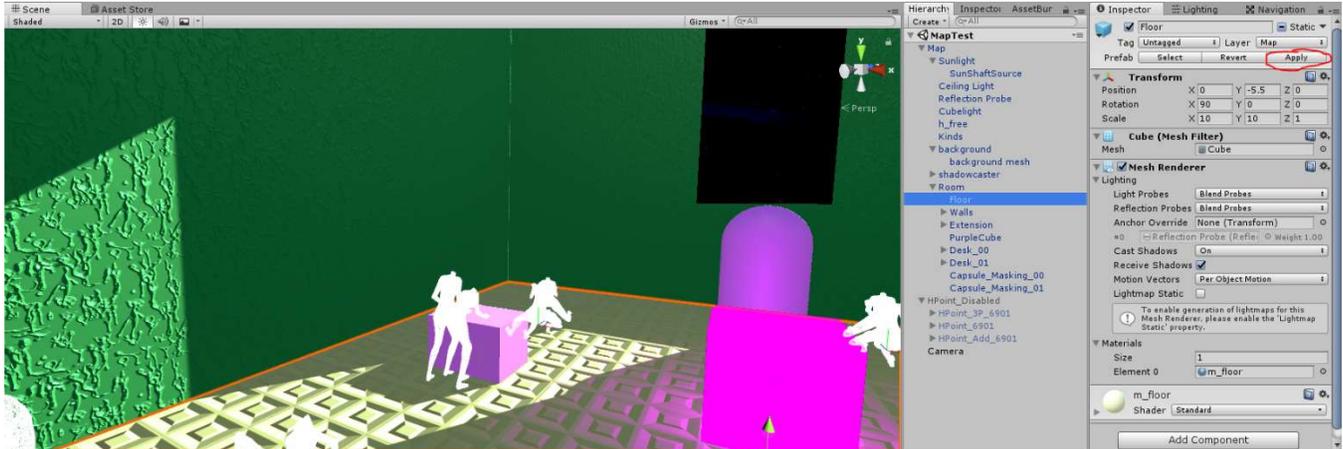


So you can see our map's scene still refers to the prefabs in the Examples folder. To make the map our own (and change it without changing the Example Map) we need to use our own prefabs. So delete the HPoint prefabs (not HPoint\_Disabled) and the Map prefab, and drag the ones from your mod's folder into the hierarchy. Drag the HPoint\_Disabled into the Visualize Gizmos script so you can see the wireframes again.



## Making Changes to the Map

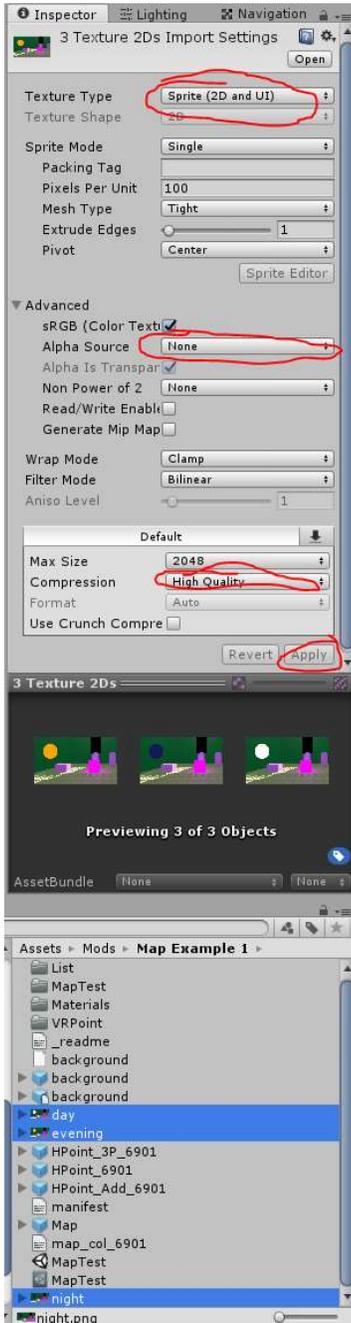
Make small changes to the map; you might break it if you delete or change things you don't understand. Currently the pieces of the map still use materials from the Examples folder. I put some new materials on the walls and floor, but there's still some materials from the Purple Room I'll want to replace eventually.



Apply any prefabs you changed (in my case this applies changes to Map prefab). Delete the HPoint prefab instances; the game will create them from the prefabs for Free-H.

## Thumbnails

Thumbnails are for day, evening, and night. I don't know if size matters; the example ones are 320x180 so that's probably a good resolution. I'll just use a snip from the editor window, which I shrunk down in GIMP and made variations for day/evening/night; these are saved as PNG and imported into my map mod's folder in Unity. You can use the existing ones for reference for import settings. Map title in the thumbnail would be good but I'm lazy.



And finally delete the old thumbnails and rename the new ones to what the old ones were (sp\_map\_6901\_00, etc.).

## VR Points

For the VR Points, we need to generate them from the HPoints; if you ever change the HPoints, you will have to do this again to make the VR Points match. So delete the stuff in the VRPoint folder if you haven't already, and then in Explorer, copy the HPoint prefabs (and nothing else).

IdingTools-master > Assets > Mods > Map Example 1

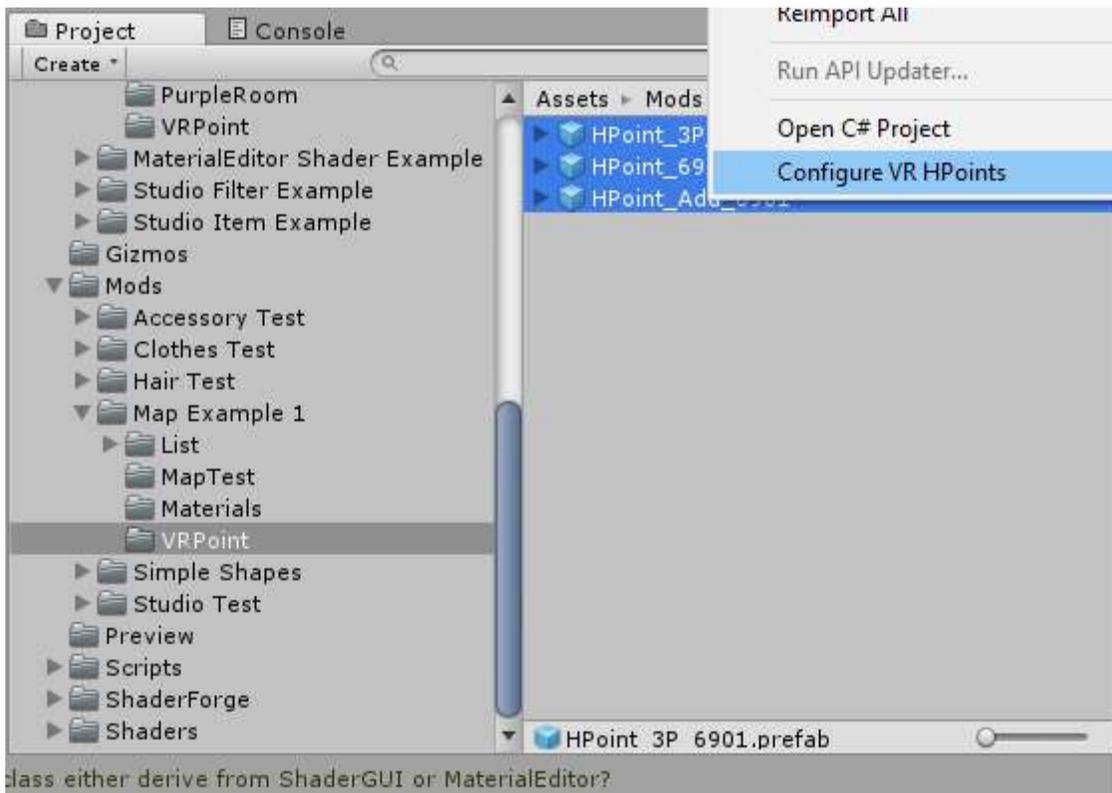
Name	Status
_readme.txt.meta	
background.mtl	
background.mtl.meta	
background.obj	
background.obj.meta	
background.prefab	
background.prefab.meta	
HPoint_3P_6901.prefab	
HPoint_3P_6901.prefab.meta	
HPoint_6901.prefab	
HPoint_6901.prefab.meta	
HPoint_Add_6901.prefab	
HPoint_Add_6901.prefab.meta	

And paste in the VRPoint folder.

r > Assets > Mods > Map Example 1 > VRPoint

Name	Status
HPoint_3P_6901.prefab	
HPoint_6901.prefab	
HPoint_Add_6901.prefab	

Back in Unity, right click them and Configure VR HPoints.



## Final Preparations to Build the Mod

The camera is mostly just to show the saturation filter in the Unity Editor; it can sort of break the game if you leave it in the scene (in Free-H it can take priority over the normal game camera, making you to be unable to interact with the game properly). Drag it from the hierarchy to your map mod's folder to make it a prefab, then delete the prefab instance from the hierarchy. Your map should look more washed-out now because the saturation filter is gone. When you come back to edit the scene later, you will drag it back into the hierarchy.

Delete the HPoint prefab instances from the hierarchy as well; the game makes them from the prefabs when needed. When you come back to edit the scene later, you will drag them back into HPoint\_Disabled.

So the scene should now just have the Map prefab instance, and an empty HPoint\_Disabled. Save the scene (Ctrl+S).

You need to assign several things to new ABs for your mod. The list file and MapInfo asset already refer to some of these new AB names; they should match. Use all lowercase, no spaces. These things get assigned to ABs; most of them you only have to do this once:

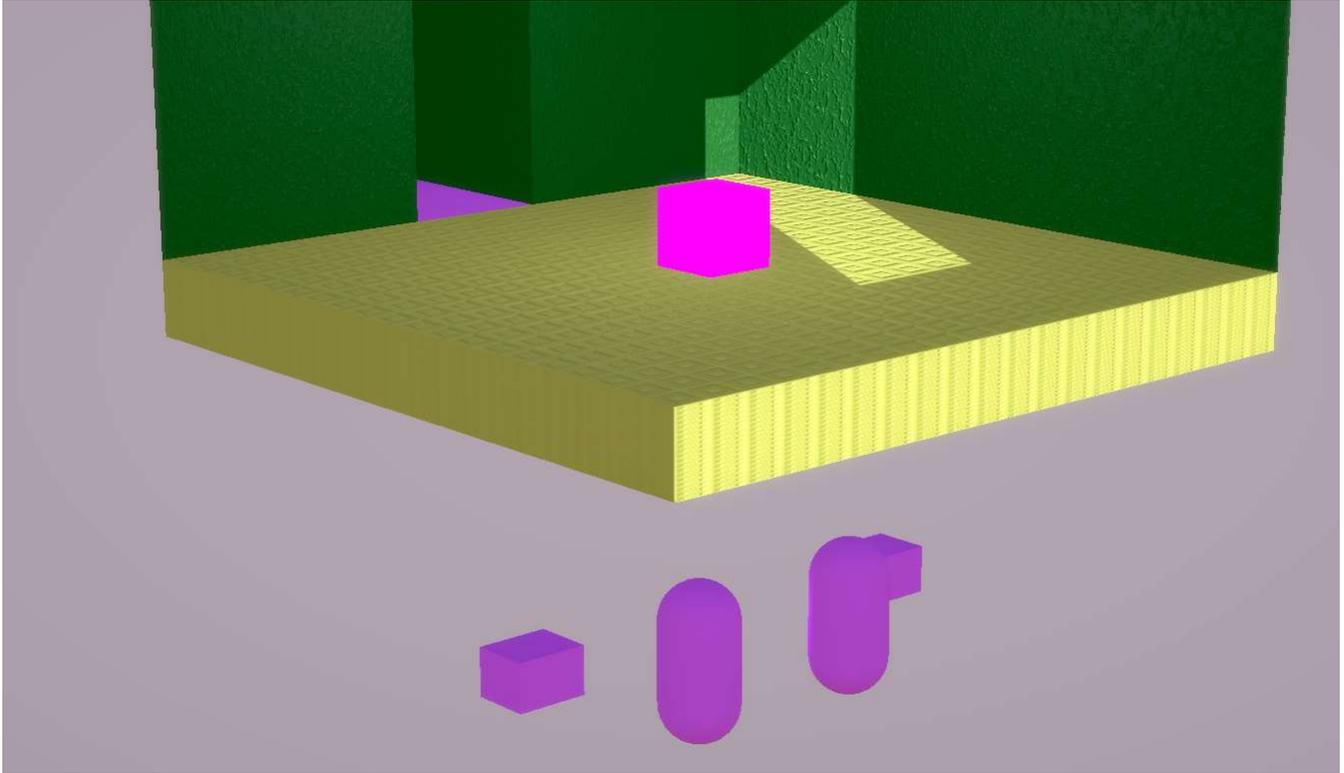
- HPoint prefabs go in an AB such as **h/common/maptest.unity3d**
- the colliders text file (starts with map\_col\_) goes in an AB such as **h/list/maptest.unity3d**
- the MapInfo asset goes in an AB such as **map/list/mapinfo/maptest.unity3d**
- the scene goes in an AB such as **map/scene/maptest.unity3d**
- the thumbnail sprites go in an AB such as **map/thumbnail/maptest.unity3d**
- the VR Points go in an AB such as **vr/common/maptest.unity3d**

If you make new thumbnails or generate new VR Points (delete the old ones first), the new ones must be assigned to the AB.

Build the asset bundles and zipmod. Test in Free-H and Studio, and VR if you can.



There's a minor issue in Studio. I assume there's an easy fix for this but am not interested enough to look into it.



## Making Further Changes

Before you go wild making an actual map, read the `_readme.txt` file. There's important info on lighting and HPoints.