

IndretsVR Virtual Tour for Unity

indretsvr.com @ 2023

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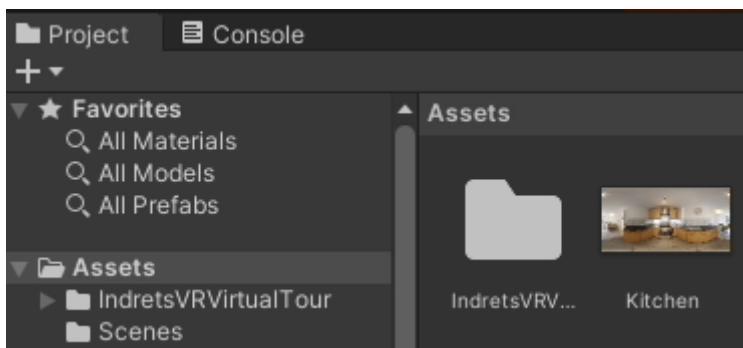
Beginner Tutorial

Creating a Virtual Tour with **IndretsVR Virtual Tour** package for *Unity* couldn't be easier following these steps:

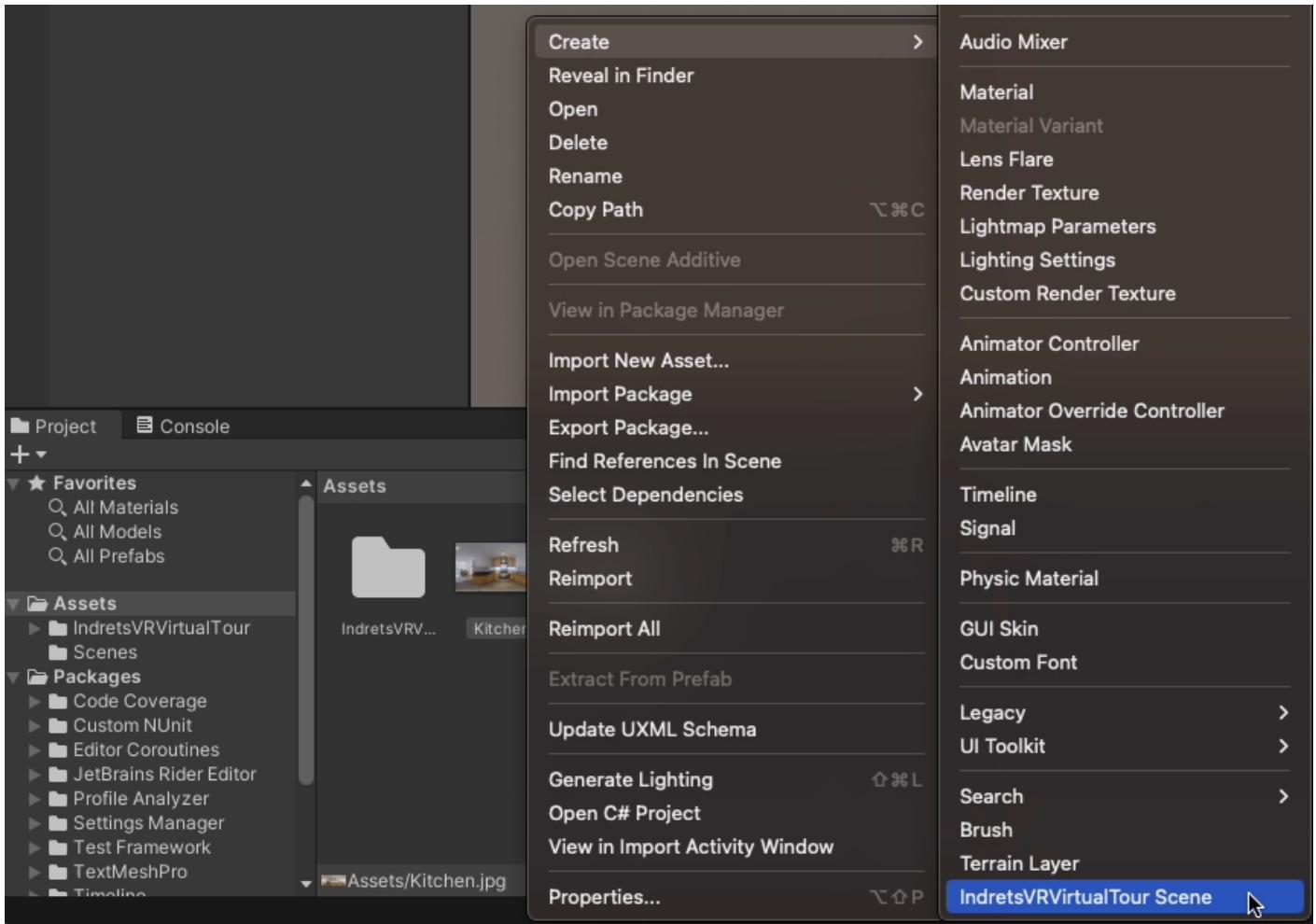
Quick Note: If you don't have any 360° images right now to follow the tutorial you could obtain some for free at [Pixexid](#)

Here we go:

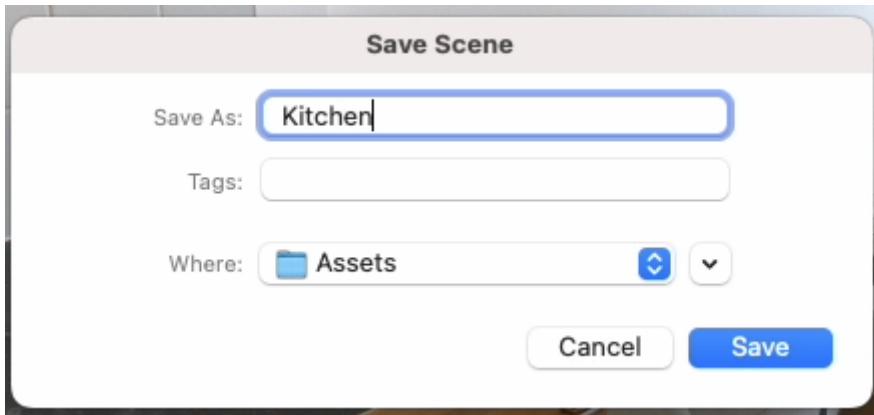
1. Import a 360° image inside your Assets folder (or an *Images* folder inside *Assets*, etc... your folder structure is up to you)



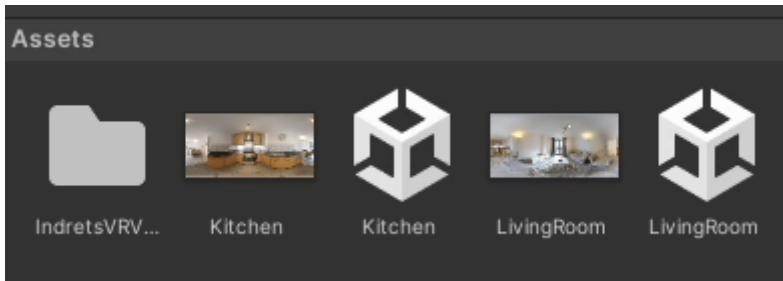
2. Click on the image with the right mouse button and select *Create -> IndretsVRVirtualTour Scene*



3. Et voilà! The first stage of your Virtual Tour. That was easy, wasn't it? Now save the Scene with a relevant name, *Kitchen* in my case. Choose the folder that better suits you.



4. Now we are going to repeat the steps 1-3 with a second 360° image. *LivingRoom.jpg* in my case.



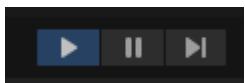
5. This is getting interesting. Now we are ready for a very simple, but yet powerful, Virtual Tour.
6. Open the *Kitchen* scene. As you see we have 3 objects: *Person*, *Hotspot* and *MainManager*. We'll learn more about them in the [Intermediate Tutorial](#) and the [Advanced Tutorial](#).



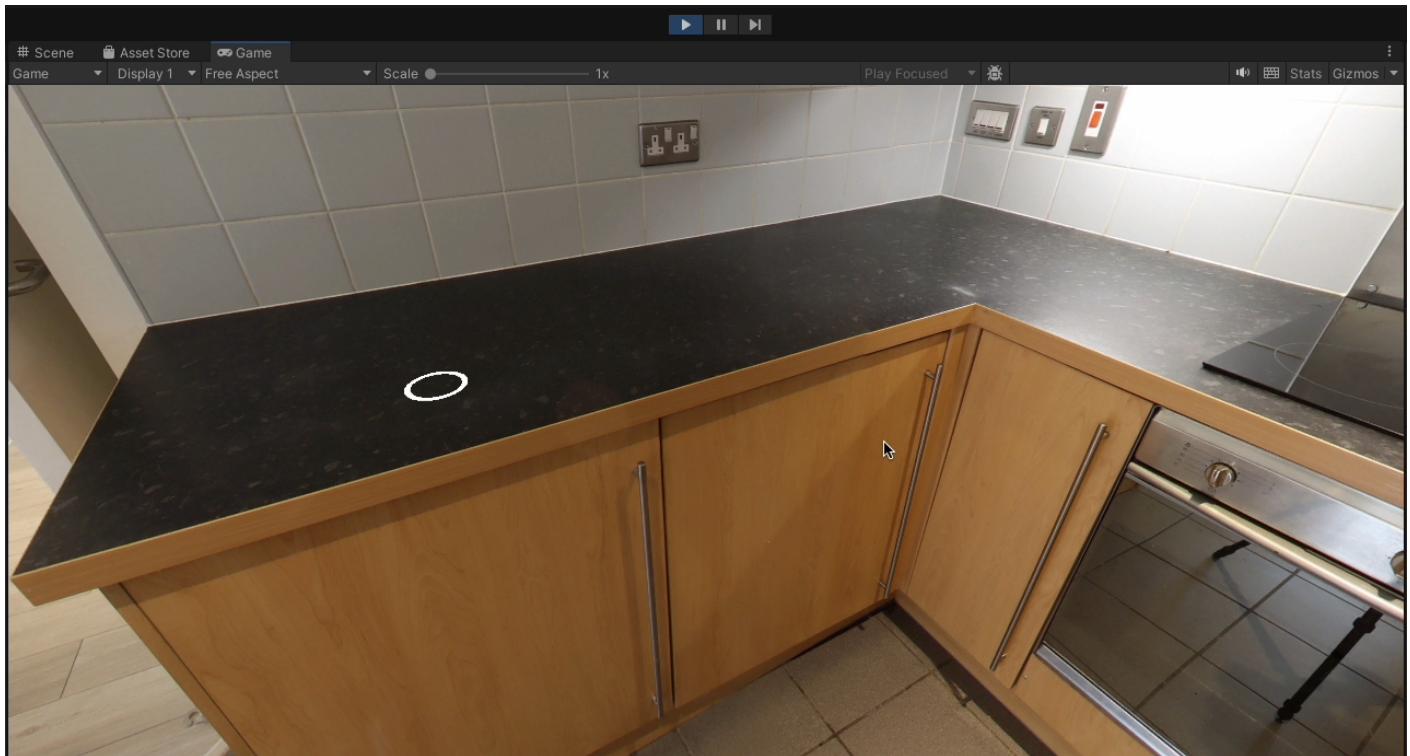
7. For now we are going to rename the *Hotspot* object to something more relevant, in my case *LivingRoom*, because this is where we want to move when we click over the hotspot with the mouse left button.



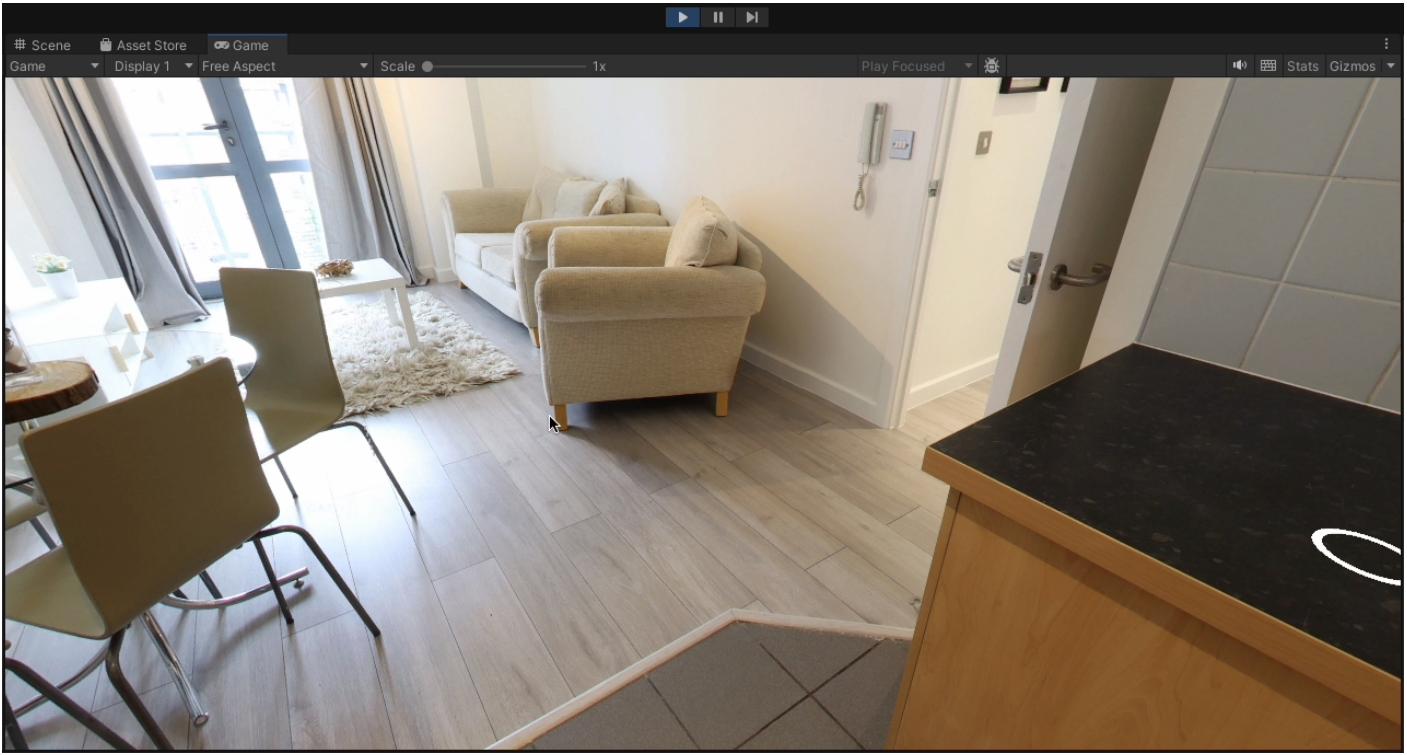
8. We need to position the hotspot in an appropriate place. To do that, please enter *Play Mode* by clicking on the *Play* button.



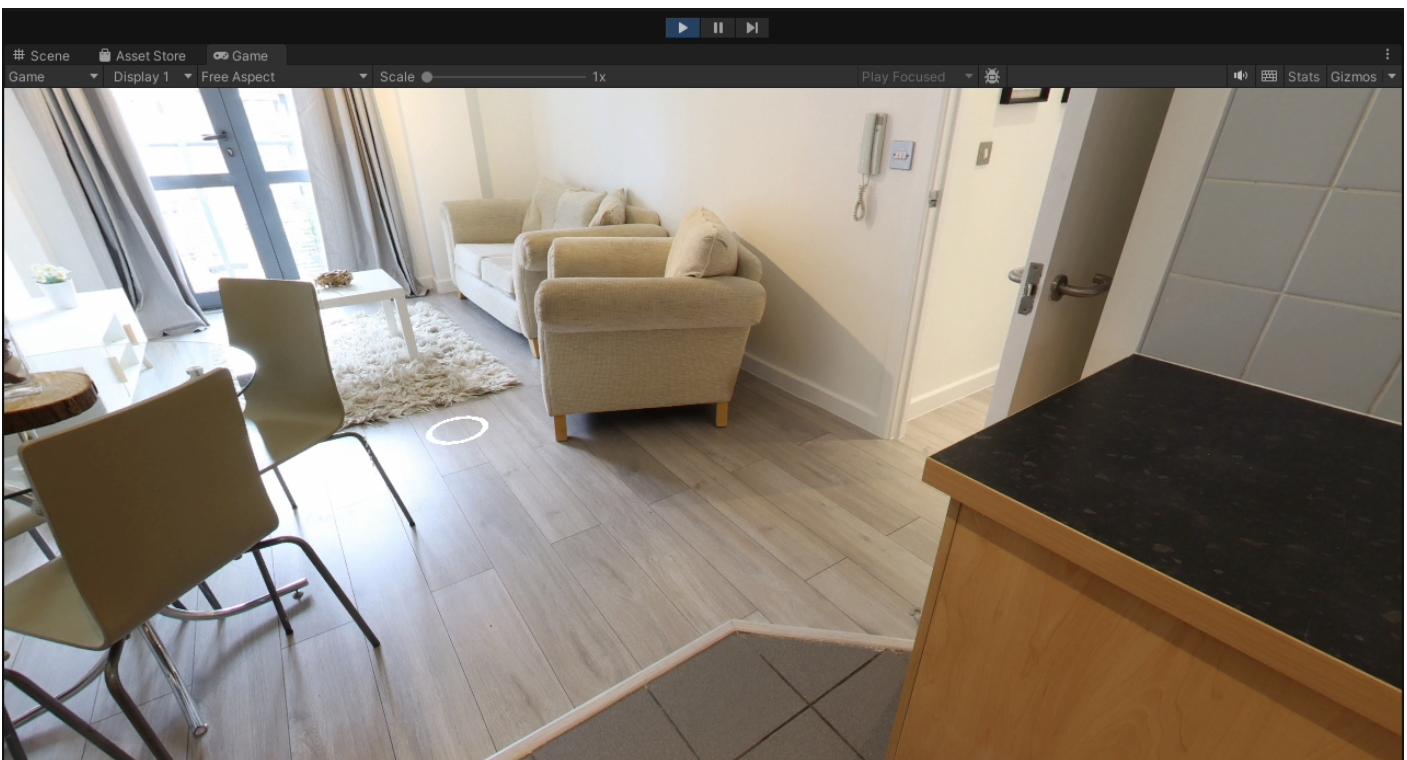
9. If you click with the left mouse button anywhere on the scene and, without releasing it, move in any direction, you will find that you can rotate and visualise the entire room.



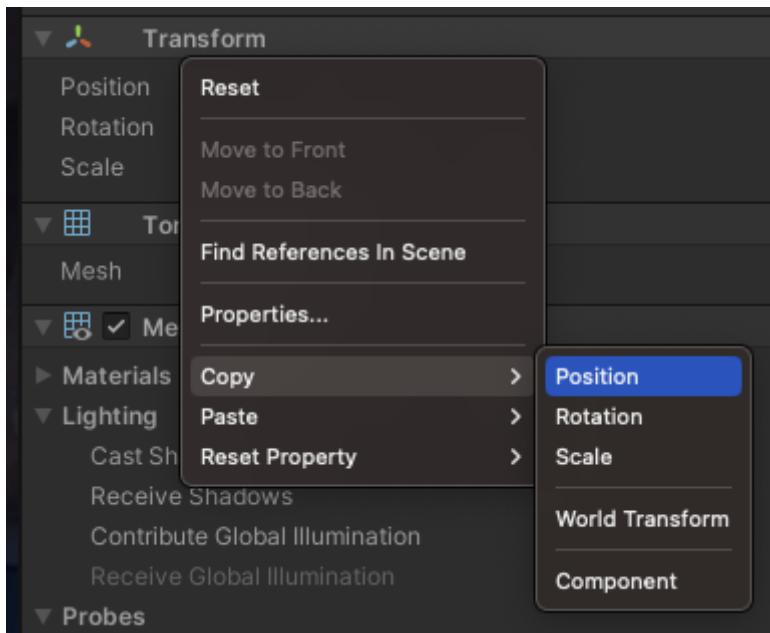
10. The Hotspot is in its *default* place. Rotate in order to find the most appropriate position.



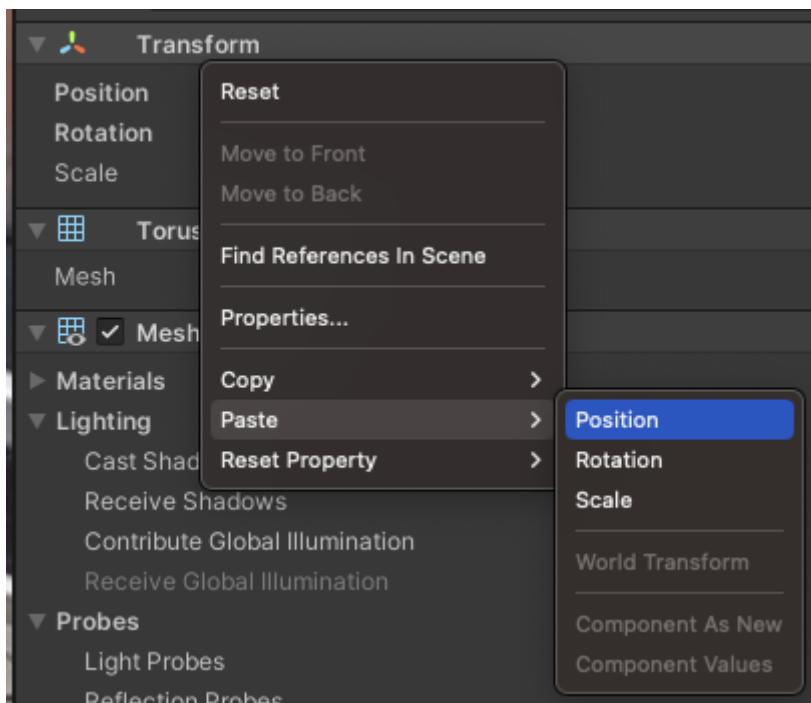
11. Drag&drop the hotspot using your right mouse button. By the way, this will not work in your built Virtual Tour app, for obvious reasons :)



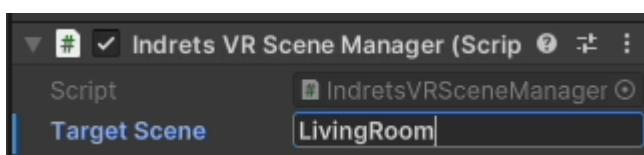
12. Now we need to keep these Hotspot coordinates when we leave *Play Mode*. With the hotspot (*LivingRoom* object) selected on your object hierarchy, go to the *Inspector* and right click over *Transform -> Copy -> Position*



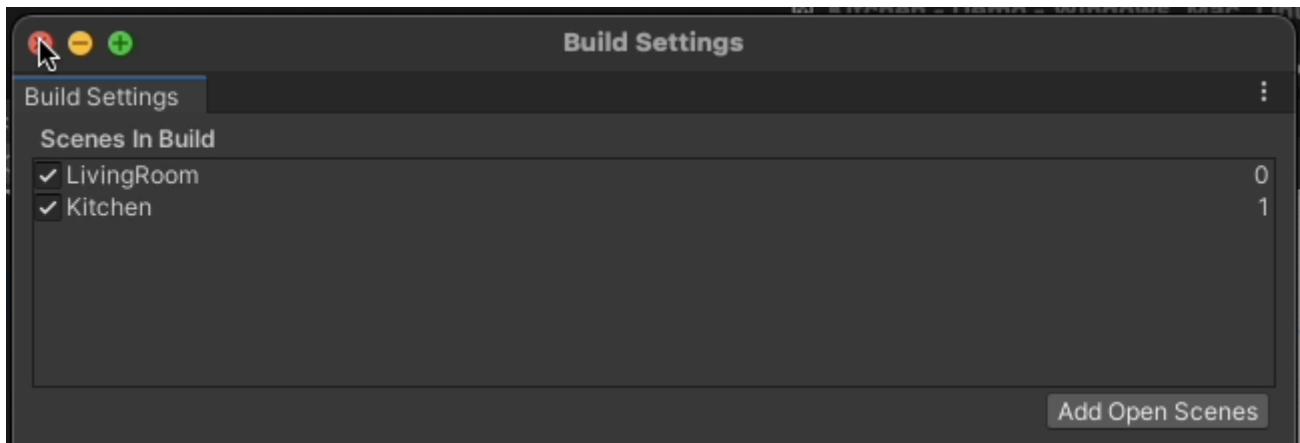
13. Leave *Play Mode* and, with the Hotspot selected, go to the Inspector and right click over *Transform -> Paste -> Position*. Next time you got into *Play Mode* the Hotspot will be placed where we want it to be.



14. Now we want to go to the *LivingRoom* when we click on the hotspot. In the *Inspector*, locate the *Indrets VR Scene Manager* component attached to the hotspot, and set the *Target Scene*. Save the scene after that.



15. If we go to *Play Mode* you should now be able to navigate to the *LivingRoom* scene. But before that let's go to the *Build Settings* and add our *Scenes*.



16. Open *LivingRoom Scene* and repeat the process to rename, place and set the of the *Hotspot*. We want it to be Kitchen.



And that's it, this is our first Virtual Tour. Not the most exciting one, but it shows the simplicity and potential of the **IndretsVR Virtual Tour** package for *Unity*.

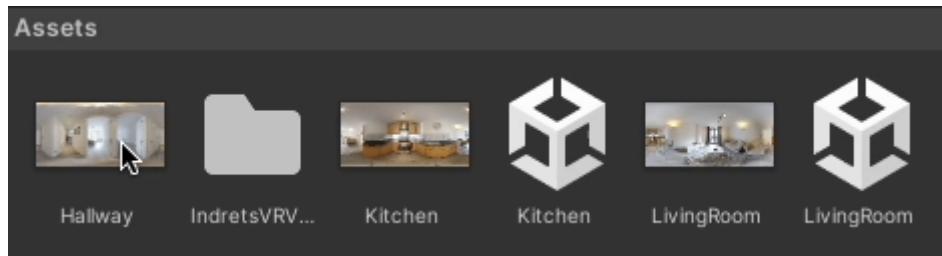
Now, if you want to know more, you can proceed to the [Intermediate Tutorial](#)

Intermediate Tutorial

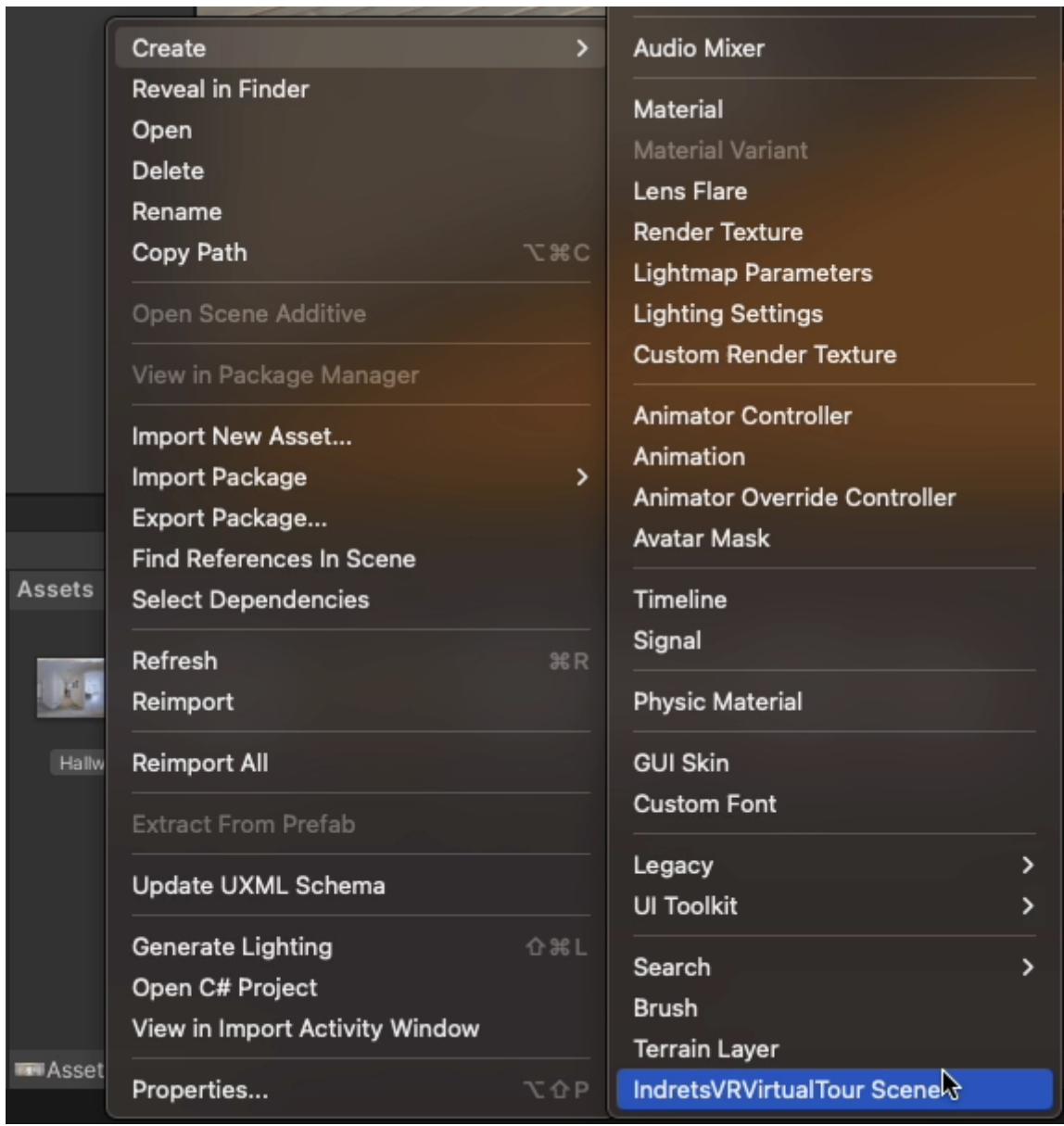
In this Tutorial we will continue with the project that we started in the [Beginner Tutorial](#). If you haven't done it, please have a look at it.

Let's go!

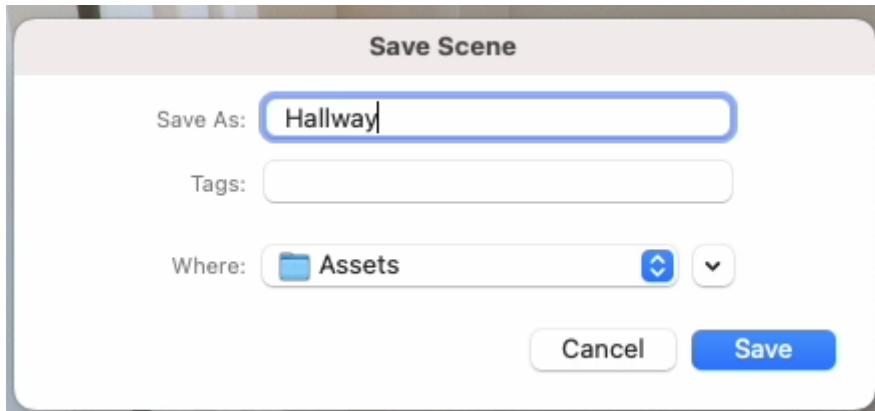
1. Import a new 360° image to create a new *IndretsVRVirtualTour Scene*. *Hallway.jpg* in my case.



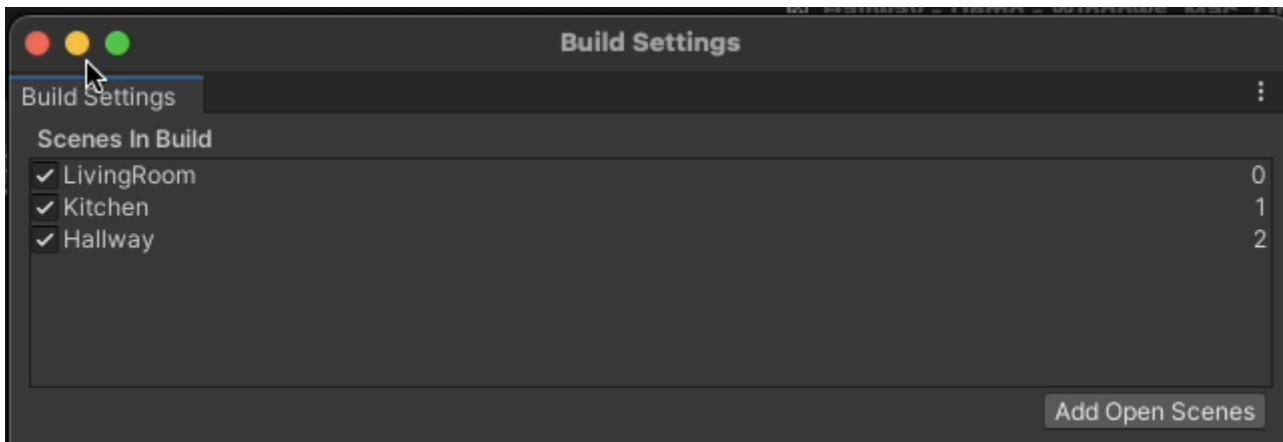
2. Right-click with your mouse over the image and choose *Create -> IndretsVRVirtualTour Scene*



3. Save the new Scene with a relevant name



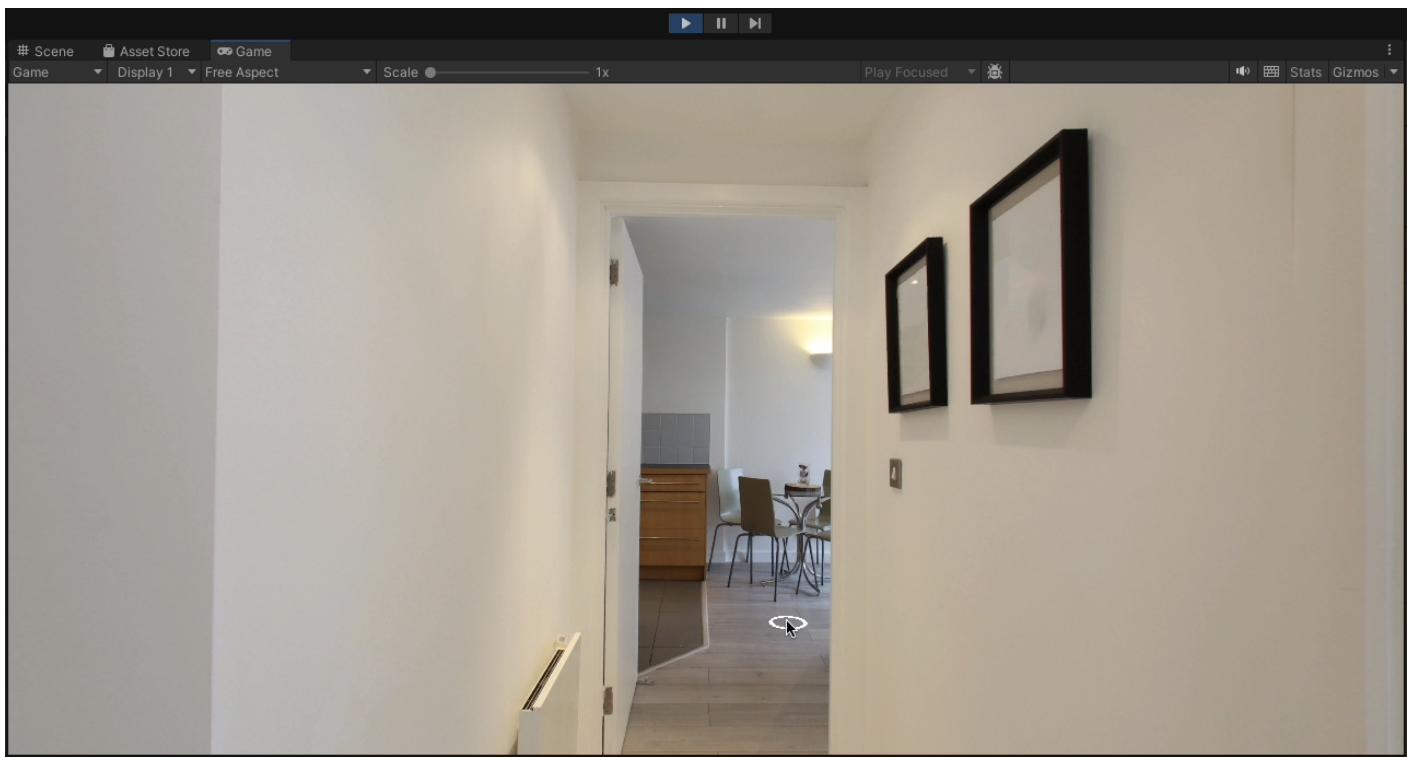
4. Add the Scene to the *Build Settings*



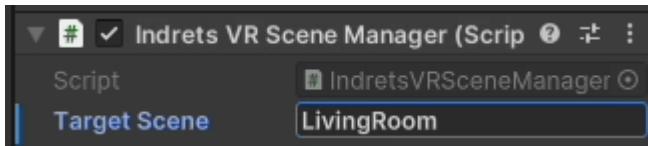
5. Rename the Hotspot to *LivingRoom*, because it will be our *Target Scene*. It's not mandatory to name your *Hotspots* and your *Scenes* the same, but it will help you identify things quickly.



6. Go into *Play Mode* and place the *Hotspot* where you want it to be. Remember to copy its position with *Transform -> Copy -> Position*



7. Exit *Play Mode*, set the new *Hotspot* placement with *Transform -> Paste -> Position* and set its *Target Scene* to *LivingRoom*. In this case is mandatory to use the name of the Scene, as you already guessed.



8. Let's go back to *Play Mode* to check that everything is working as expected.

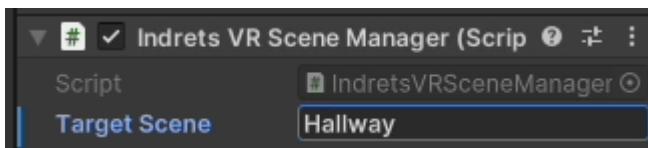
9. If everything looks good, save your *Scene* (if it's not) and open *LivingRoom*



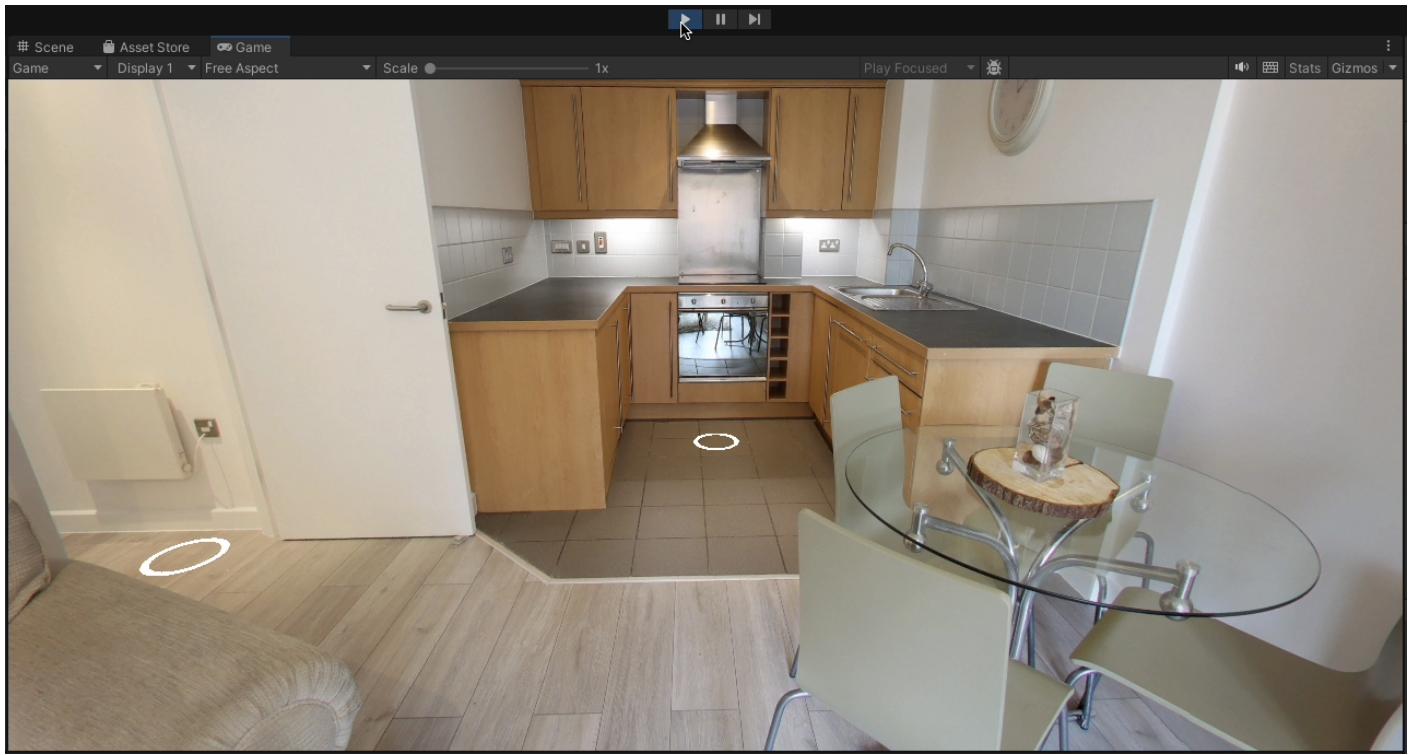
10. Duplicate the *Kitchen* hotspot object and rename it to *Hallway*



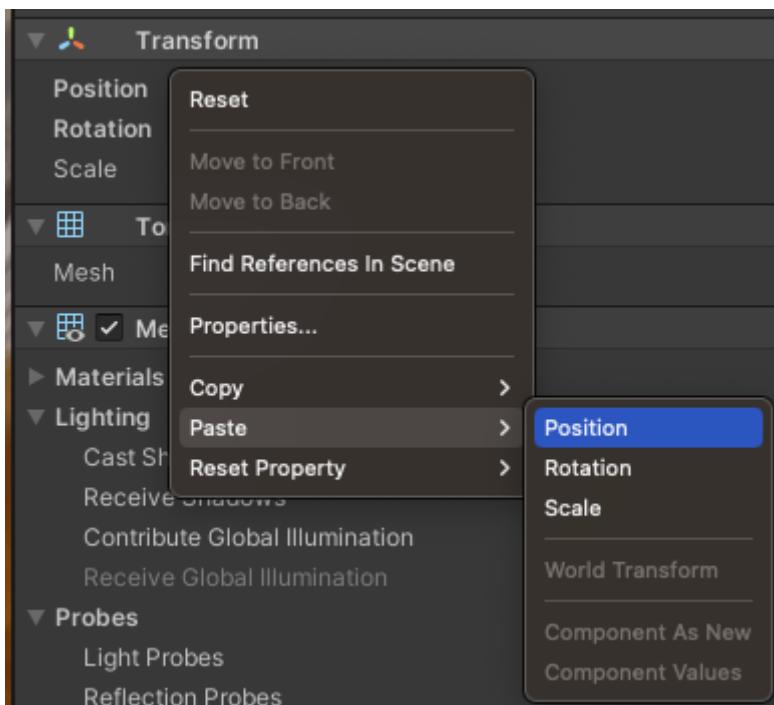
11. Set its *Target Scene* to *Hallway* too



12. Now enter *Play Mode*. Since we have duplicated the *Kitchen* hotspot, now both hotspots will be placed in the same position. Select the *Hallway* object in your hierarchy and modify (slightly) its X or Z position in the *Inspector*, so you can identify which one is it. Now you can *Drag&Drop* it to the desired position with your right mouse button. When you are happy with it, copy its position with *Transform -> Copy -> Position*



13. Paste the new position to the *Hallway* hotspot right-clicking on *Transform* and then choose *Paste -> Position*

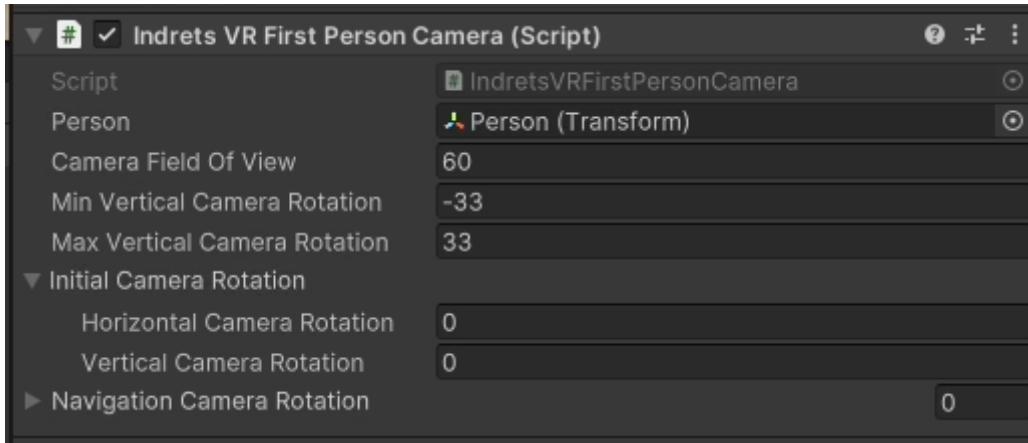


14. You can go into *Play Mode* and check that everything is working as expected.

15. As you may have noticed (or maybe not) when an *Scene* is loaded, the camera is not always showing the most exciting view. But fortunately, we can fix that! If you unfold the *Person* object, you'll reveal the *Main Camera* object.

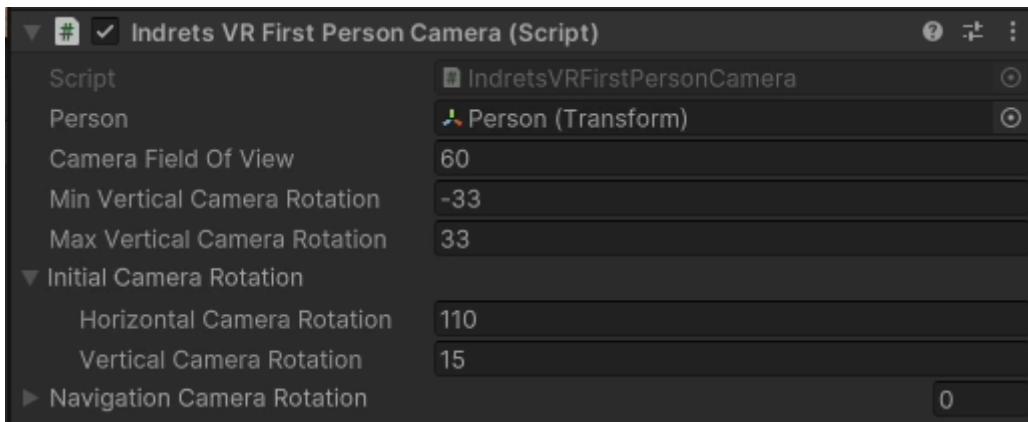


16. Select the *Main Camera* and in the *Inspector* you will see all the different values that you can set to tune-up your Virtual Tour, from a Camera perspective. For now we are going to focus in the *Initial Camera Rotation*

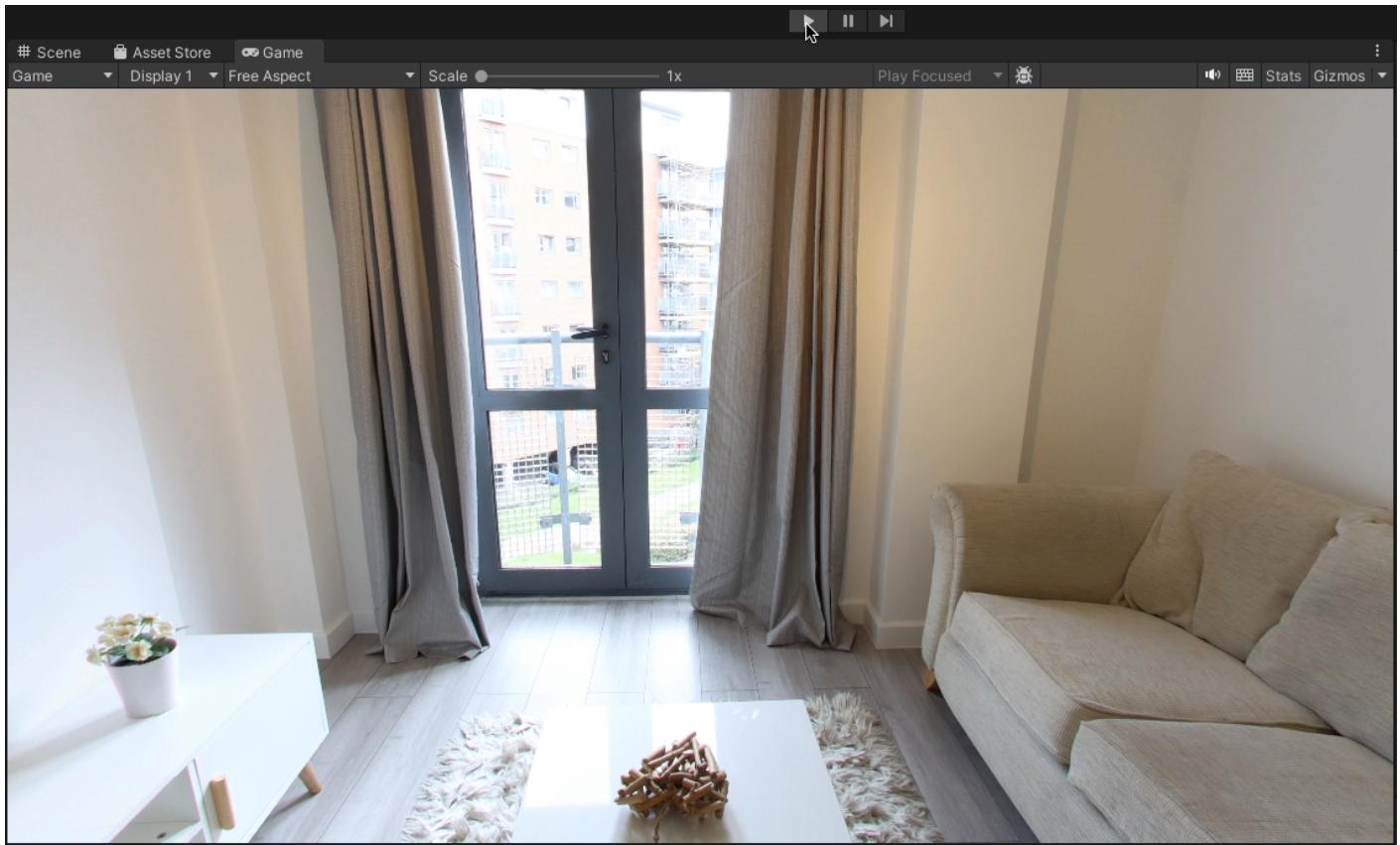


17. If you want your camera to turn 90° right (from its current position) when the scene loads, set 90 as the *Initial Camera Rotation -> Horizontal Camera Rotation*. If you want it 45° to the left, set -45 . If you want to set a positive value and get the same result you can set 315, which is $360 - 45$.

18. You can do the same with *Initial Camera Rotation -> Vertical Camera Rotation*. If you want to rotate your camera upwards you can use a negative value (or subtract it from 360). To rotate your camera downwards use a positive value.

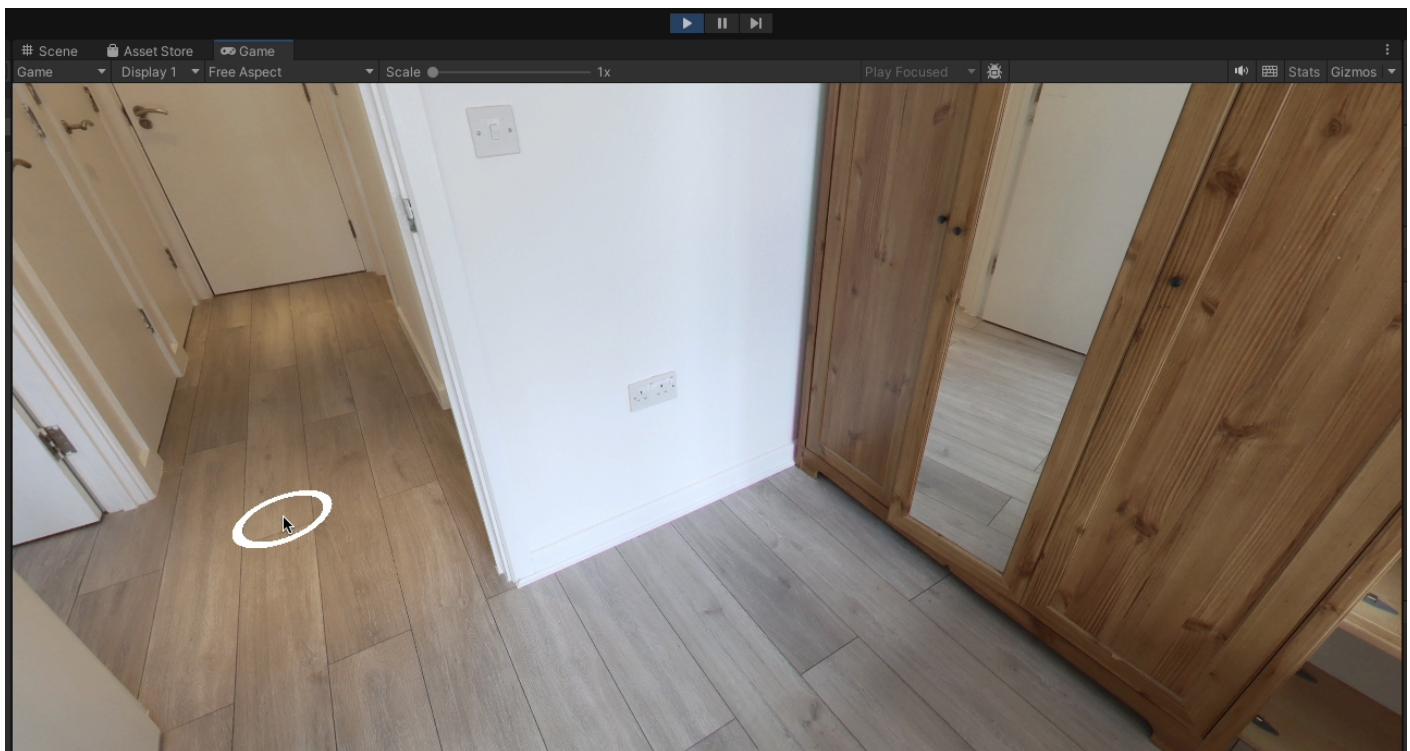


19. Again, you can check in *Play Mode* that the *Camera* is pointing to the proper place when the *Scene* loads.

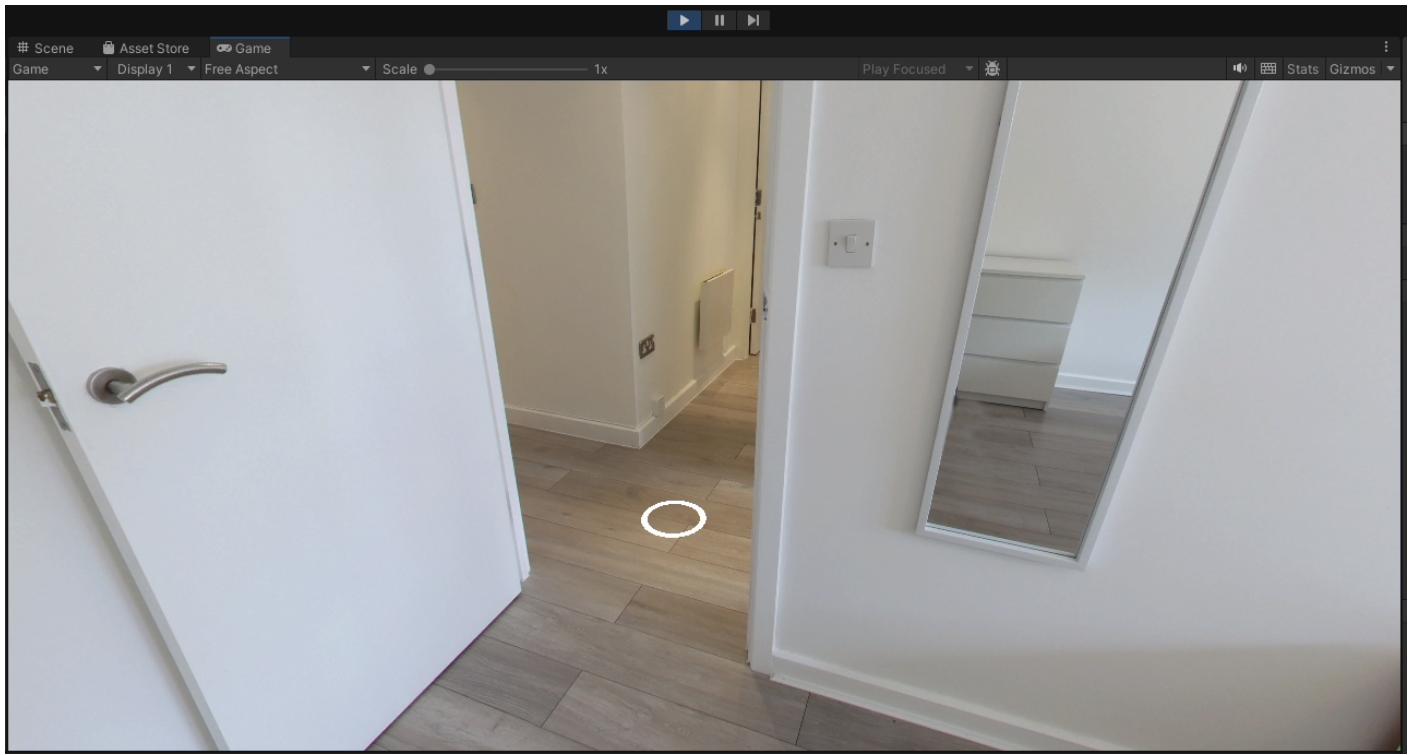


20. Let's add two new *IndretsVRVirtualTour* Scenes with all what we have learnt:

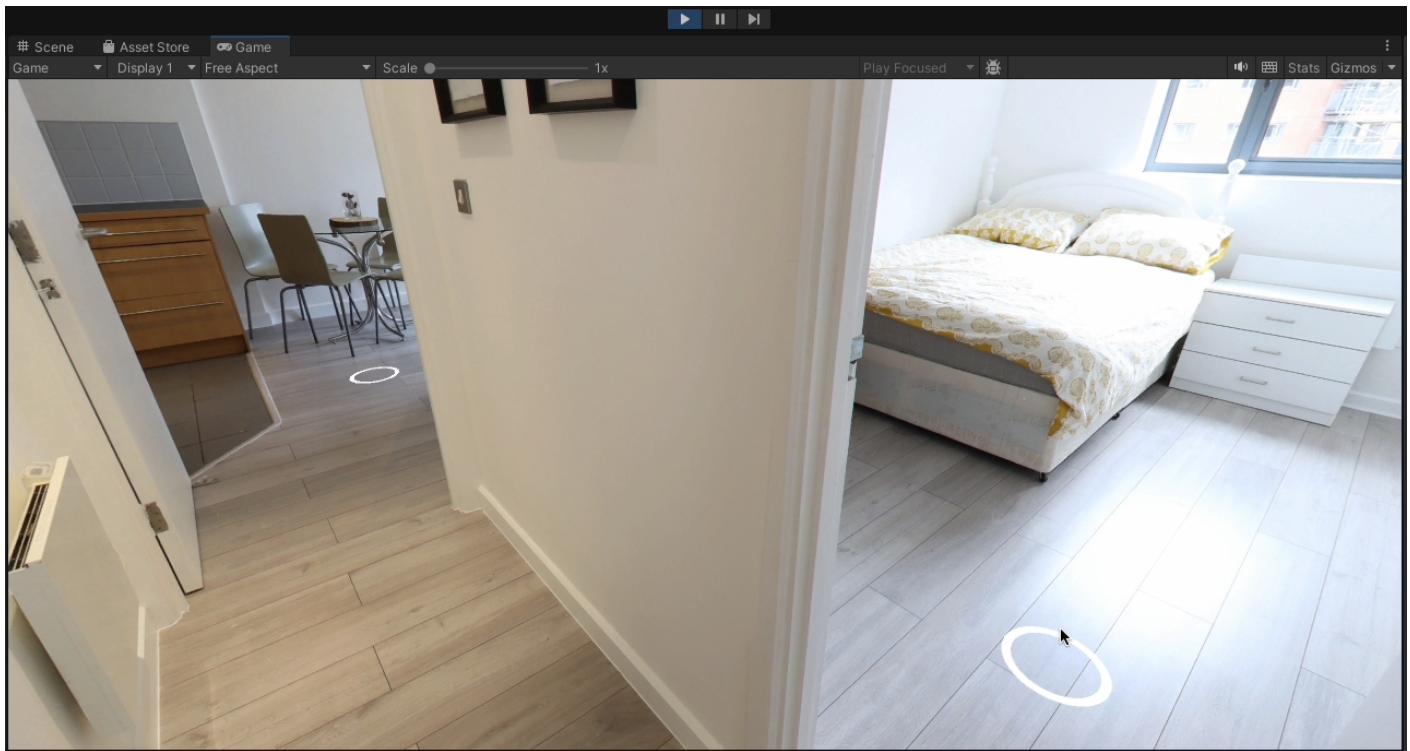
Bedroom1

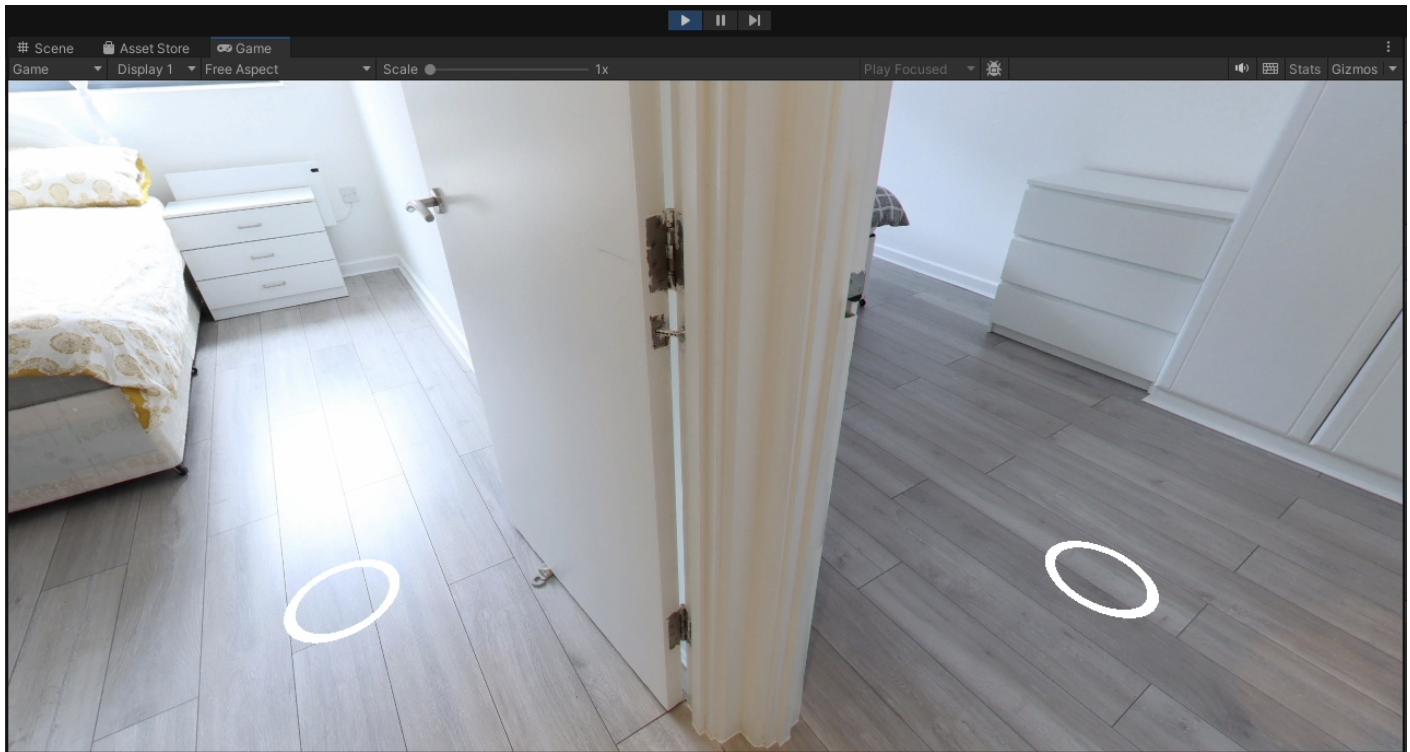


Bedroom2



21. In the *Hallway*, add *Hotspots* for the two bedrooms



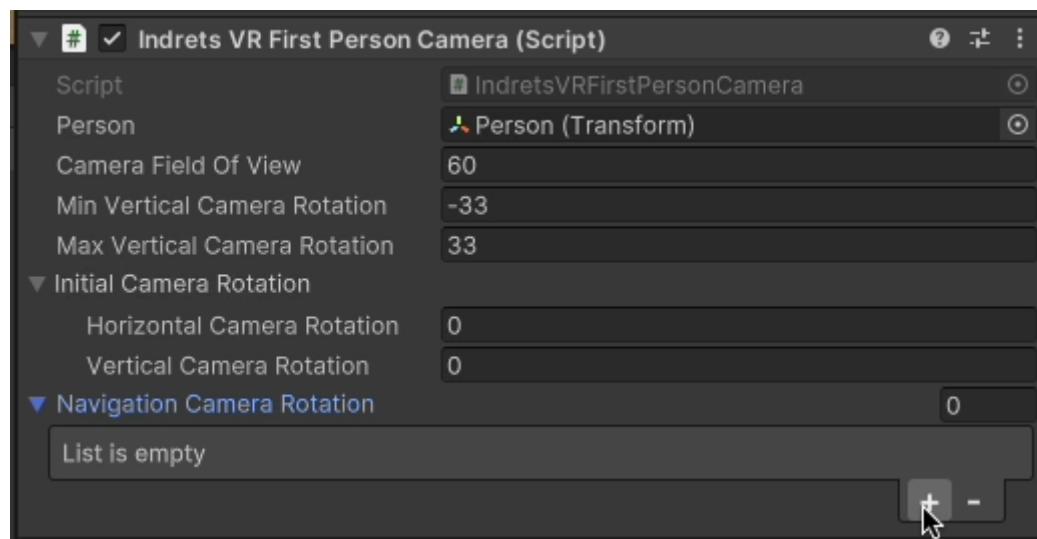


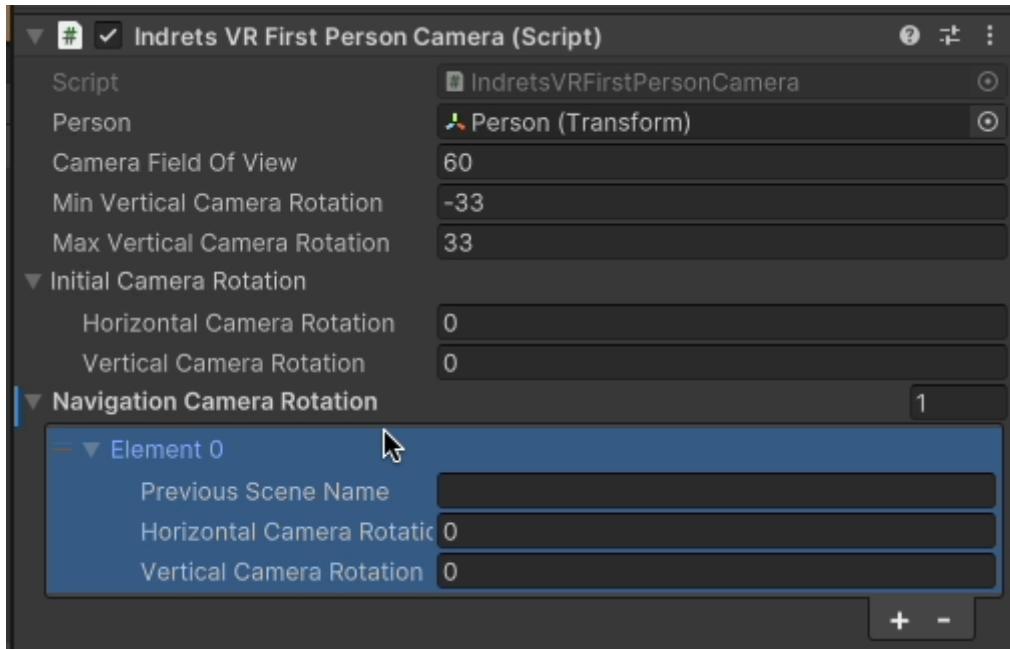
That's all for now. In the [Advanced Tutorial](#) we'll have a look at all the settings that you can customise, so if you want more, go for it!

Advanced Tutorial

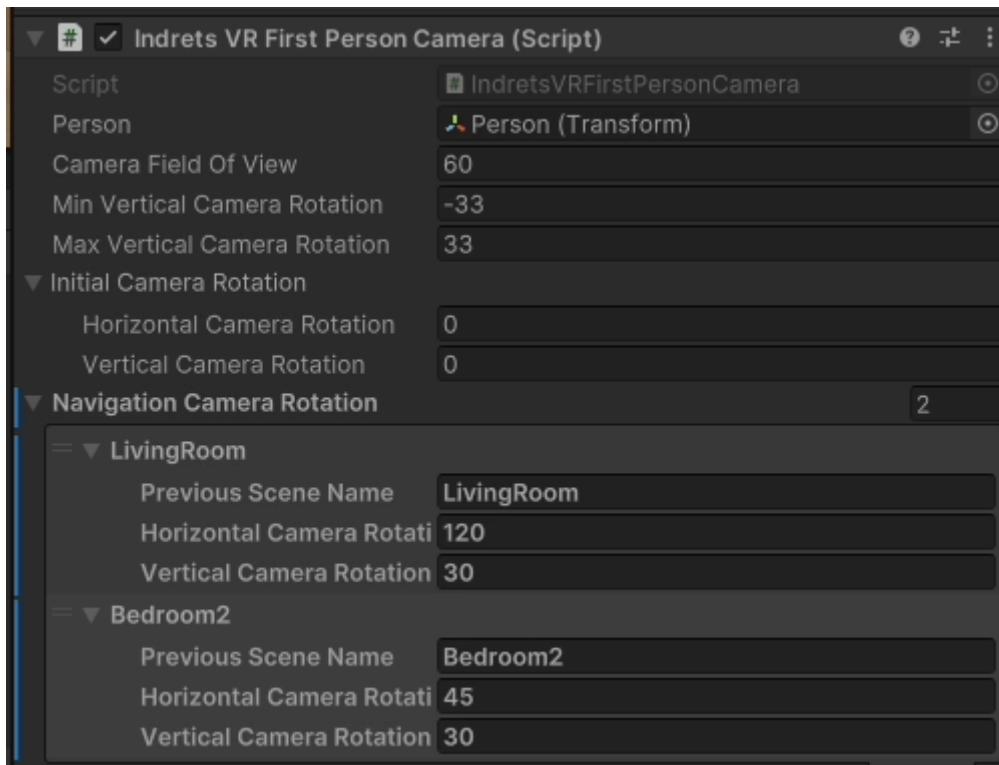
In this Tutorial we will continue with the project that we started in the [Beginner Tutorial](#), and that we improved in the [Intermediate Tutorial](#). If you haven't done it, please have a look at it.

1. First, let's set the *Initial Camera Rotation* for all our *Scenes* until they suit our needs. Go on to step 2 when ready.
2. As you know, we have 3 *Hotspots* in the *Hallway*, this means we can "land" in the *Hallway* from three different *Scenes*: *LivingRoom*, *Bedroom1* and *Bedroom2*. What if we want to have different *Initial Camera Rotation* depending on which room we are coming from? Fortunately, we can do that with the *Navigation Camera Rotation*. Let's open the *Inspector* and add a new element in the *Navigation Camera Rotation*

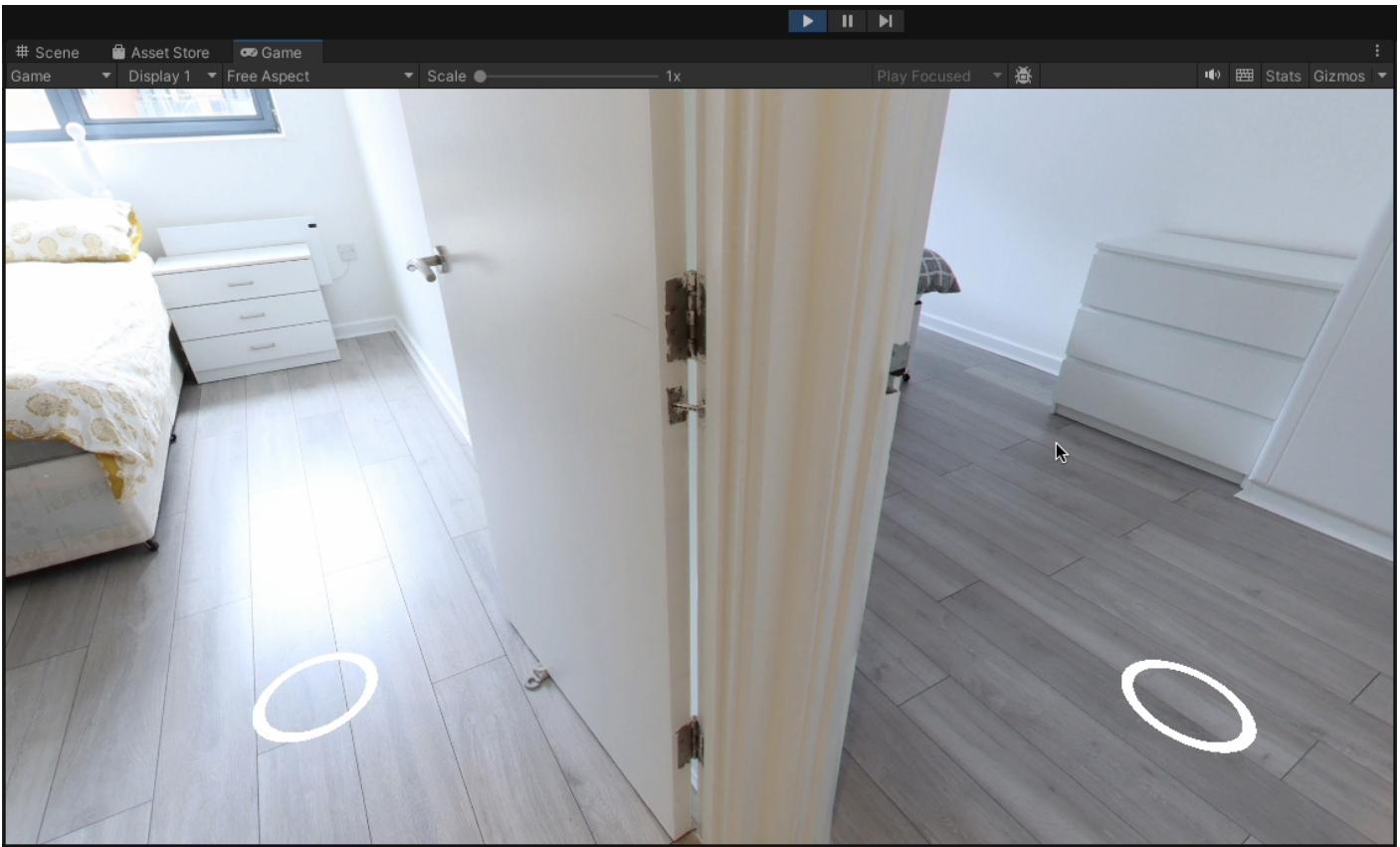




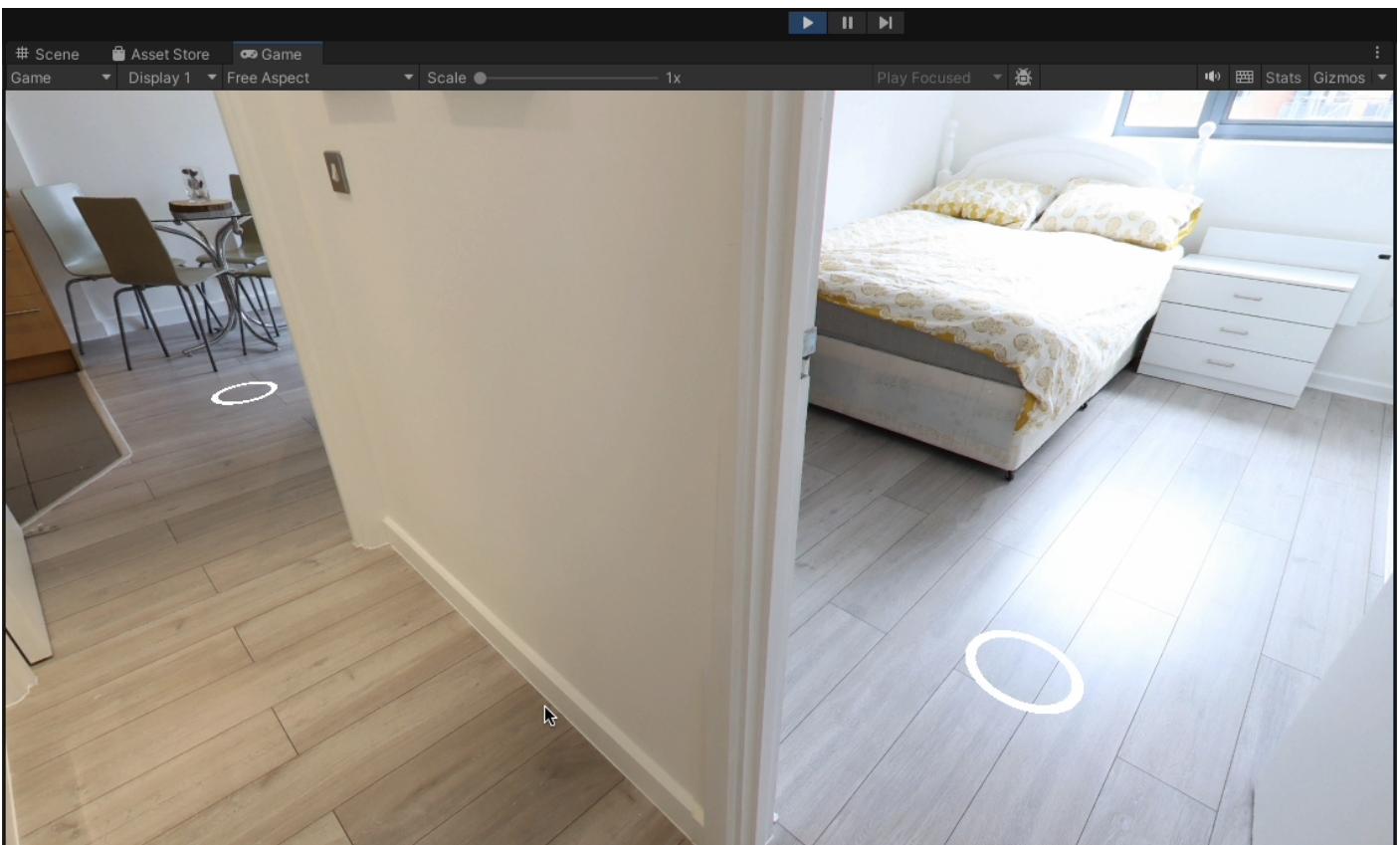
3. I'm going to define different rotations depending on which *Scene* we are coming from. Actually is not necessary to define a specific orientation for a *Scene* when you want it to be the same as the *Initial Camera Rotation*.



4. This is the initial view when I land in the *Hallway* from the *LivingRoom*



5. And this is the initial view when I land in the *Hallway* from the *Bedroom2*



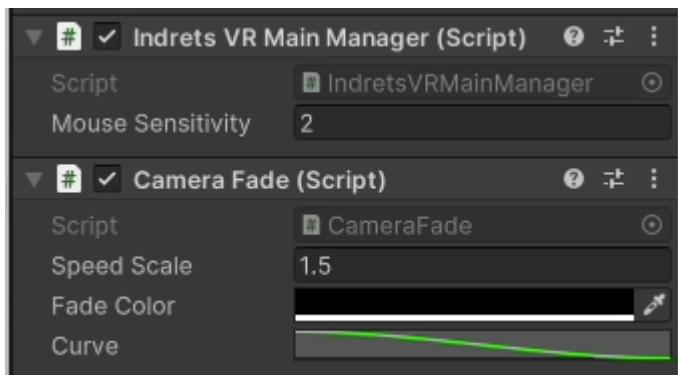
6. Maybe is not too exciting, but I think it can be useful for example if you are walking across a hallway with many hotspots all the way. You might want to keep the navigation direction to offer a better experience to the viewer.

7. You can also limit the Min and Max vertical rotation of the Camera (and in fact, I recommend it). By default you can rotate between -33° and 33°, being 0° the horizon line. Feel free to experiment with it. If you want to change it globally you can modify the values in the *Person prefab* -> *Main Camera*



8. You can also experiment with the *Camera Field Of View* but it can give you some weird results. I've found 60 is the one that better suits me. If you plan to use a different one you might want to change it in the *Person prefab* -> *Main Camera* so it affects all your scenes.

9. If you select the *Main Manager* object and go to the *Inspector*, you'll find a few more settings. You **don't** need to modify these settings on the *Main Manager* prefab. They will affect all your scenes anyway:



- *Indrets VR Main Manager* script
 - *Mouse Sensitivity* will determine how fast the Camera rotates when you Drag&Drop your mouse. The higher, the faster. Depending on the size of your images you might need to adjust this.
- *Camera Fade* script is provided by [ReCogMission](#) with some minor adjustments to my needs and is used for the fade in / fade out transitions between scenes. The main values are exposed in the inspector:
 - *Speed Scale* specifies how quick your scene will fade in / fade out. The higher, the faster.
 - *Fade Color* is quite self explanatory
 - *Curve* lets you modify how the fade animation goes. Feel free to experiment but don't get out of bounds or things may not work as expected.

This is the last of the Tutorial series. Feel free to ask any question you may have and enjoy using *IndretsVR Virtual Tour* package for *Unity*!