



DIY anywhere door using SPARK AR in 10 steps

by Kruthi S

First, download the 2 files present in this link below [object manipulation and cube_occlusion file]

portal_resources - Google Drive

 https://drive.google.com/drive/folders/1aT9yPs2nKGV2P8uJikK_si5UdKu0drZK?usp=sharing



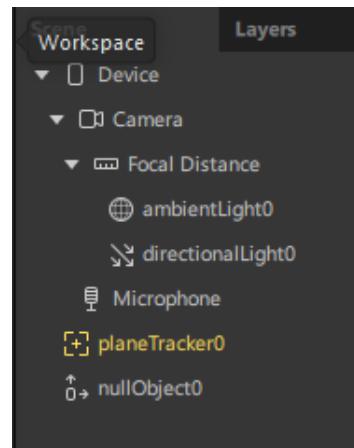
STEP 1

Start off with a blank SPARK AR project and insert “plane tracker” into the scene



STEP 2

Insert “null object” into the scene and drag it out of the focal distance drop down to make it into a separate entity. Here’s a picture for your reference.



STEP 3

Import a room of your choice from the spark ar library into the assets.

After the import, drag the room object from assets into the scene column and place it into the null object.(ensure that the room is a child of the null object)

Here's how my room looks like after this and the scene hierarchy.



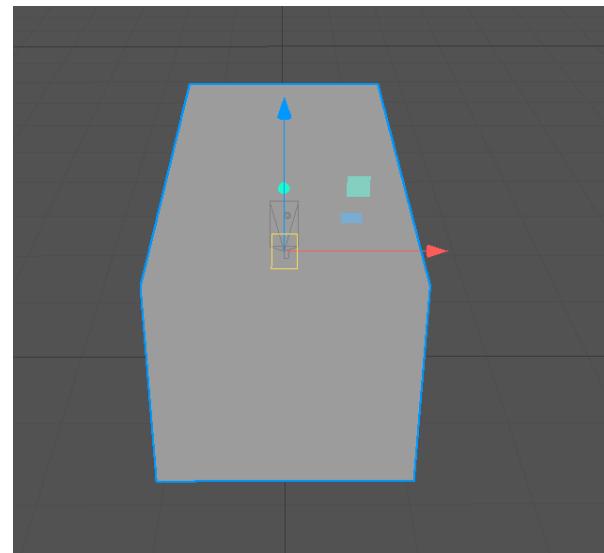
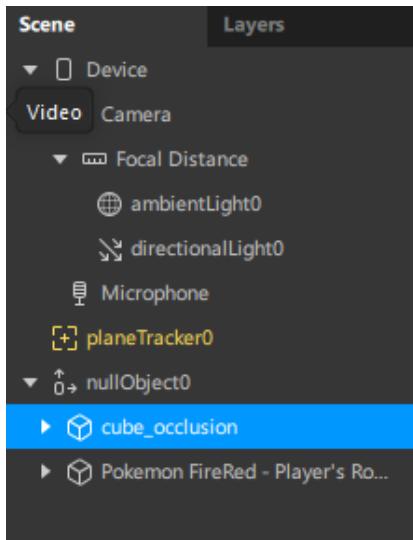


STEP 4

Tip: you can use right-click on your mouse to move around in the viewport. You could also use alt+left-click to move horizontally or vertically. Use the scroll to zoom in and zoom out.

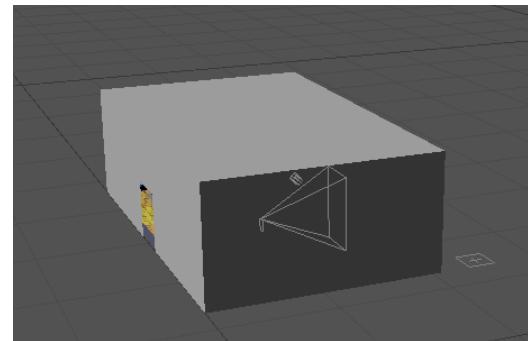
Now, import the cube_occlusion.dae file that you downloaded initially from the drive link to the assets.

Then insert the same into the scene as a child to the null object and above the room in hierarchy. (if incase the import fails, please try again)



STEP 5

Scale the occlusion cube to the desirable size so as to cover the entire room and have only a part of it visible through the door like opening in the cube.



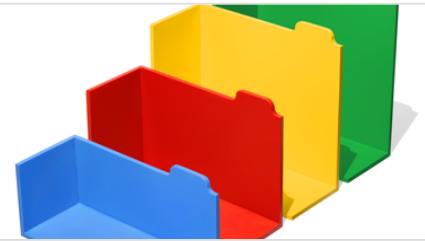
Make sure that the room is completely enclosed by the occlusion cube.

If incase you get stuck in this step and didn't get the scaling part right, then no worries. To continue on, download the folder in the link below and open it in your SPARK AR.

download the entire folder and then open the SPARK AR file. If need be, import the assets again.

checkpoint_1 - Google Drive

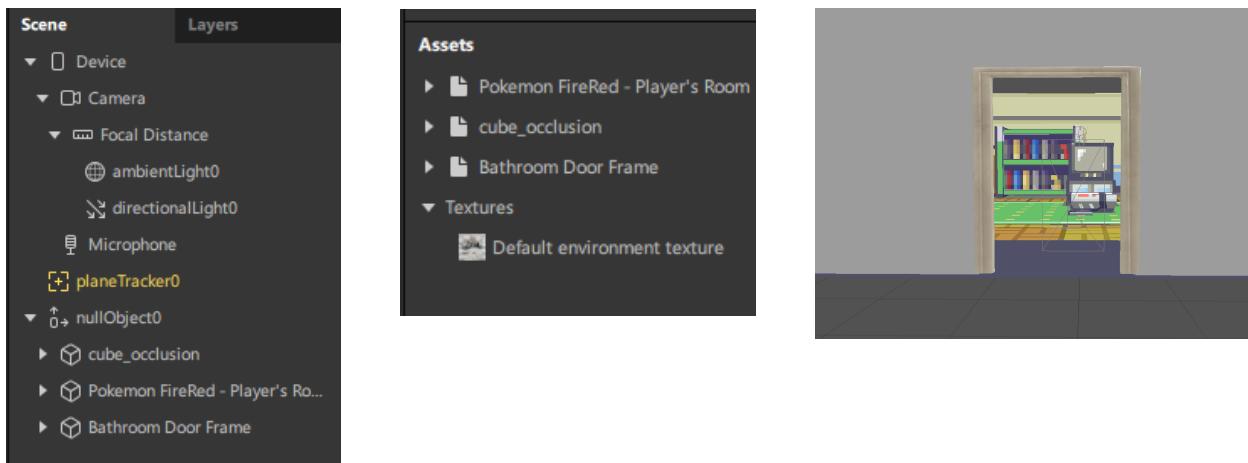
 <https://drive.google.com/drive/folders/1YfExSyPEWTpwucNmnsrRjntY1tmYUoG4?usp=sharing>



STEP 6

So let's now give our room a door! Search for a door frame in the SPARK AR library and import it. Then insert the door into the null object and below the room in hierarchy.

Scale the door frame to perfectly fit around the door opening in the occlusion cube.

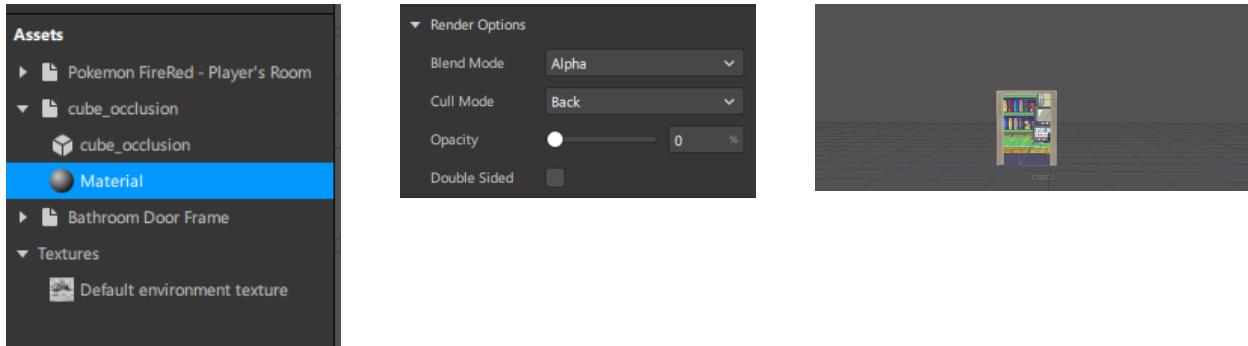


STEP 7

Now to create a portal like effect and make only the door visible, locate the cube_occlusion under assets and click on the drop down.

Select material and on the right side menu, find the “blend mode” under render options. Change the blend mode to “alpha” and set the opacity below to 0.

Now the cube turns transparent and only the door is visible.



If incase you get stuck in this step and didn't get material change right, then no worries. To continue on, download the folder in the link below and open it in your SPARK AR.

download the entire folder and then open the SPARK AR file. If need be, import the assets again.



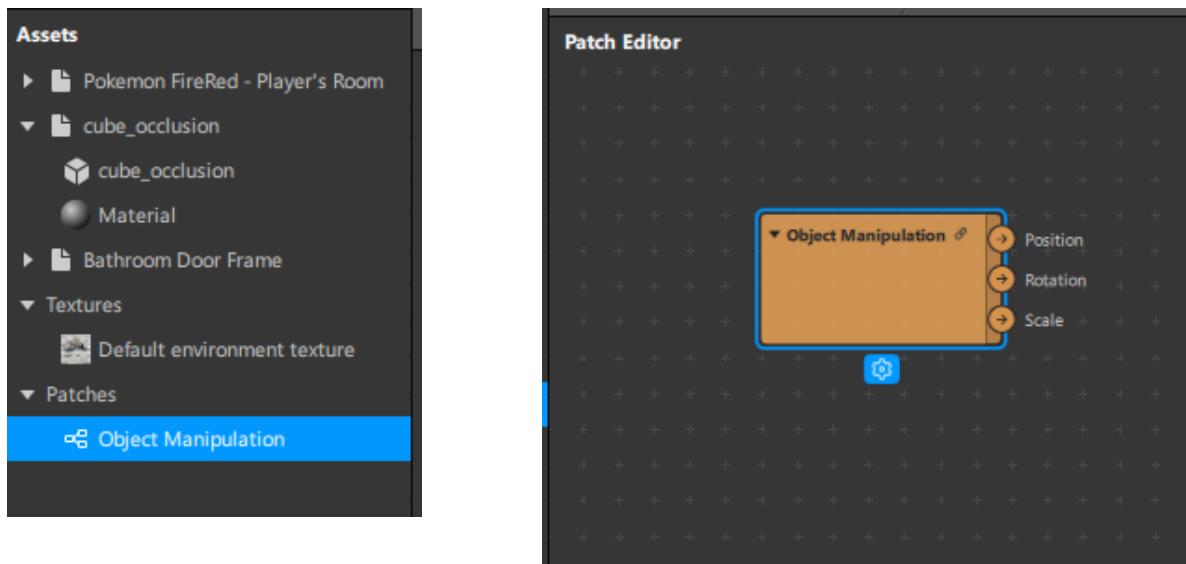
STEP 8

To drag, scale or rotate our portal on your phone we need to add a small patch.

Import the “object manipulation” file that was present in the drive into assets.

Go to “view” in the left top corner and click on “show/hide patch editor”.

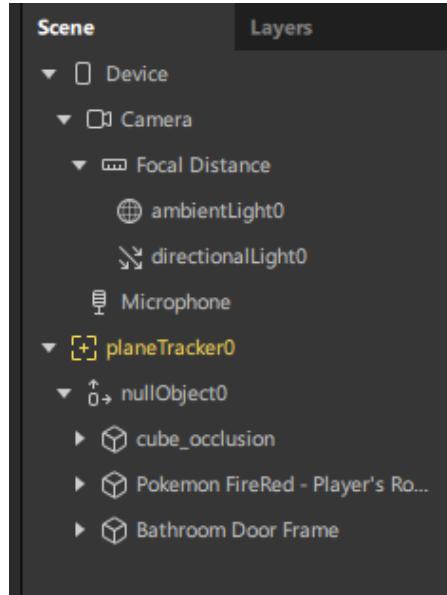
Drag the object manipulation patch from the asset into the patch editor.





STEP 9

Drag the null object into the plane tracker to set it as its child. Ensure that the same hierarchy is followed as in the following screenshot.

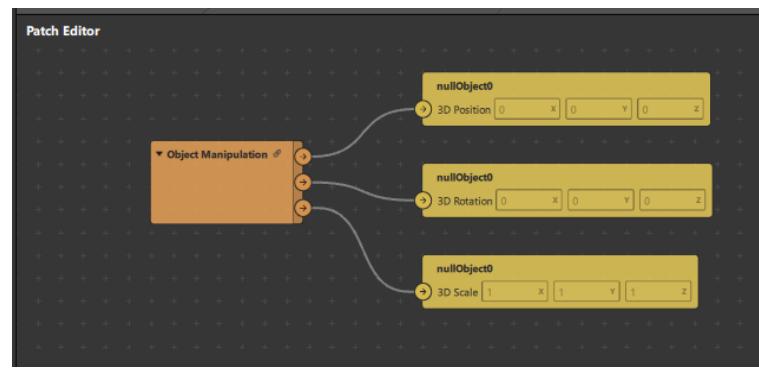
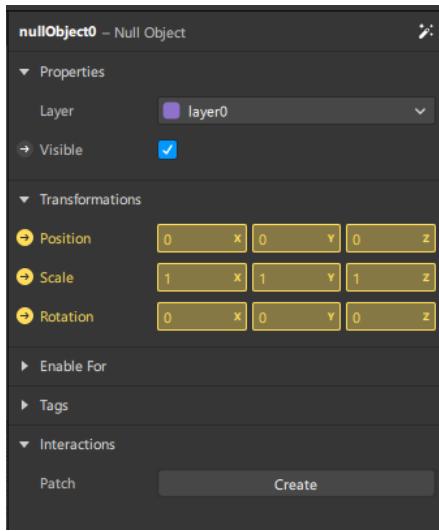


STEP 10

Click on the null object in the scene and in the right menu, under transformations, click on the arrows in front of the the 3 fields namely position, scale and rotation.

This adds 3 blocks onto the patch editor. Drag and separate them.

Attach the relevant arrows from the object manipulation block to the respective 3d null object blocks.



VIOLA! You have successfully created an AR door into another room!

Go ahead and test your app using the “test on device” option on either SPARK AR player on your phone or Instagram or Facebook.

When you test the effect, you’ll see the door to the room. Using gestures, zoom into the door and at a certain point, you’ll enter the room virtually. Now you can move your phone around and feel as if you’re physically present in the room.

Here’s a demo video of how it would look like. [the room in the video has some extra walls and a roof, which can be created easily using the plane object]

demo video - Google Drive

<https://drive.google.com/drive/folders/183uEHMPqua6z-966fKYsrYkH1bPHPPrW9?usp=sharing>

Thank you for following through! ☺

Here’s the link to download the final file, ready to test out on your device!

final_ready - Google Drive

📄 https://drive.google.com/drive/folders/1CjyloPvBxneNzAUDJPNTzrw_h_Mxd_u?usp=sharing



Some useful resources

Spark AR Tutorial - Occlusion Portal and Hole in the Floor (EN Captions)

Hola! Bienvenidos a Emiliusvgs. En este momento te mostraré una guía básica de cómo funciona la Oclusión en Spark AR. En este caso para crear un simple porta...

➡️ <https://youtu.be/doNaxDHp-Gc>



How to Portal - arfected - The AR Agency

Hi! You're likely here because you saw the portal to Bedroom in Arles, a famous painting by Van Gogh. The 3D model of that room has been masterfully crafted by Ruslan Sokolovsky, make sure to check out his

➡️ <https://arfected.com/spark-ar-portal-tutorial/>



Incase of any doubts, write to me at: kruthi5483@gmail.com

Keep Building :)