How To Use Office Editor

In this tutorial, I will show you how to use the Office Editor to design office in Room Building Starter Kit. This tool is designed to customize the office in an in-game editor. Without this tool, when we need new office, we have to put the props such as floors, walls, office doors by hand to combine a new office. This tool let us build new office in the same way with building room in demo scene.

1. Limitations

Due to this asset is a starter kit but not an “engine” or “tool kits”, as well as it’s a complex system, it’s not possible to modify this asset with just one click to satisfy all kinds of requirements from different games. I will keep adding features to rich the tool kits in this asset and try my best to make it more convenient to customize.

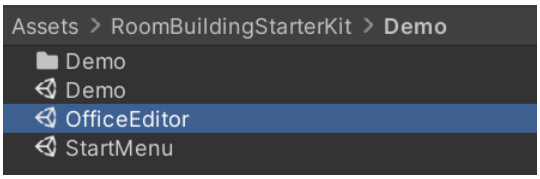
Before we start, please let me talk about the limitations of the office editor. Currently, the floor size is fixed at 2 meters in Unity and doesn’t support to change it. The floor size determines the unit of the grid-base build system. Based on the grid system, all the props’ sizes or occupied tiles in this asset are determined by the floor size. For example, the office walls, office doors, room walls, room doors, furniture occupied tiles, most of them are deisgned with a multiply of 2 meters. Which means, if you want to replace the models, you have to make sure all your models are designed refer to the sizes of the corresponding models and fit with the floor size. I list most of the models’ sizes in the Model Size document under the document folder. **I’m working on extending the office editor and the entire project to support customize floor size!**

By the way, the office editor can only design an office at a time. I think that’s enough to resolve the pain point of customizing office. The office build by office editor has an origin point, this origin may not be fixed and you couldn’t rotate the office after save it to a prefab. If you need to rotate it, you should use the rotate function in blue print mode during designing office in office editor.

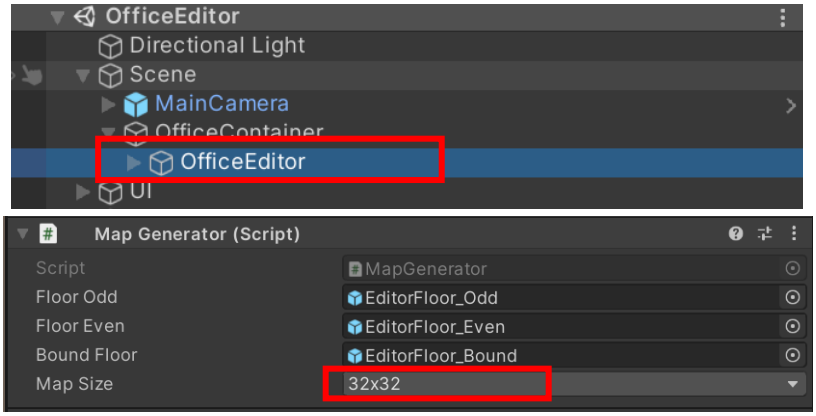
2. Customize Office

The office editor is an in-game editor which it’s a unity scene and you can only use it by running the OfficeEditor.unity scene. Its location is:

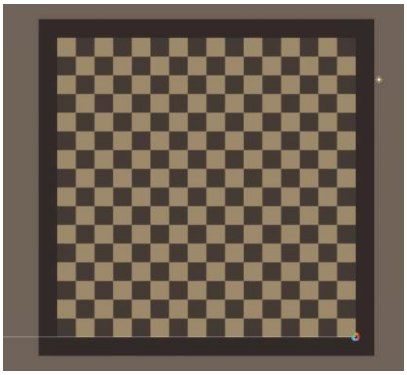
Assets/RoomBuildingStarterKit/Demo/OfficeEditor.unity



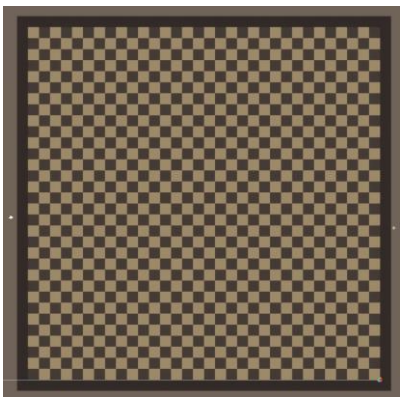
After open OfficeEditor.unity, only thing you need to care about it's the "OfficeEditor" game object in the hierarchy window. By clicking it, from its inspector window, you can see a script component named "Office Editor". There has a "Map Size" property. The map is the base ground we will build our office on and the map size determines the tile number of the ground.



The map size ranges from 16x16 to 128x128. Every time you change the map size, the map will be generated automatically. Notice that the map size can only be changed in editor mode. Change the size in play mode will not re-generate the map.



16x16

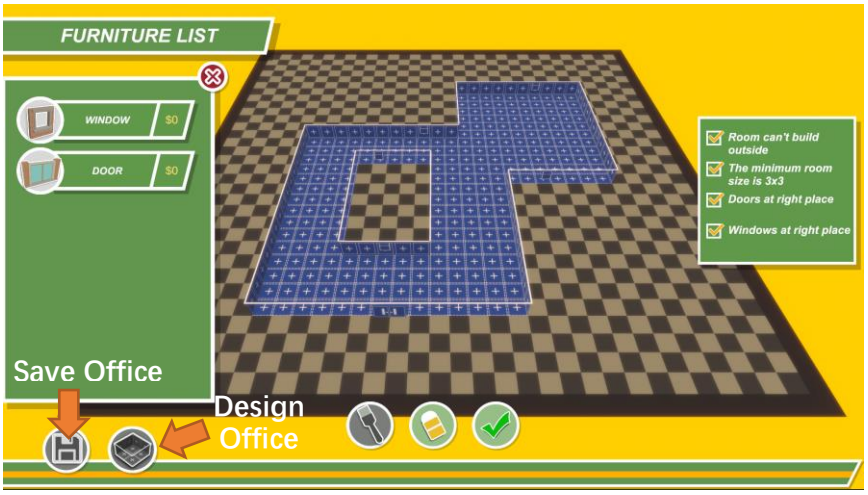


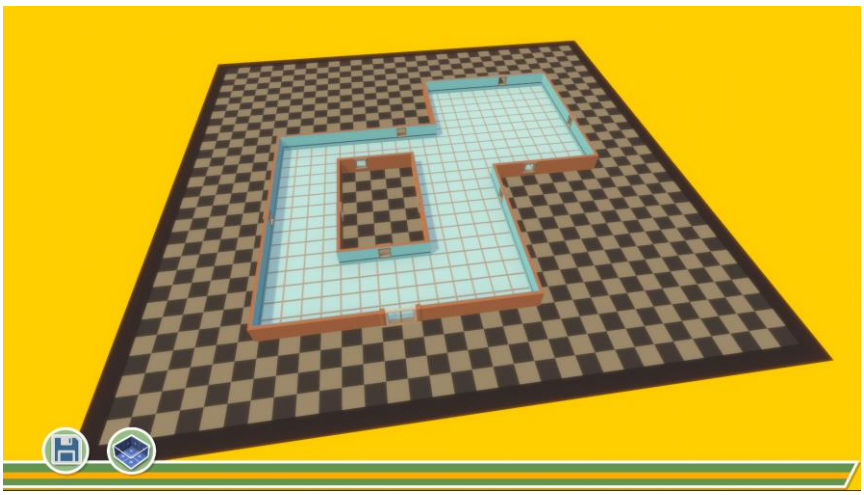
32x32

After generate the base map, let's run the scene. By clicking the Blue Print button, we could enter blue print mode. In the blue print mode, we can design the office layout just like what we do in room blue print mode. We can put window and office door, currently, these are only two props we need for an office. Same with the room blue print mode, the office blue print mode also supports add floor, delete floor, move office, rotate office! After we design the office layout, we can click the confirm button to build the office.

You can also click the Blue Print button again after the office has been built, this will let you enter blue print mode again to continue designing your office.

Notice that after you save the office to a prefab, you can't rotate it anymore. Rotate an office may cause wrong behaviors during build room inside this office! If you need to rotate it, you can only use the rotate function in blue print mode in the Office Editor before saving it to a prefab!

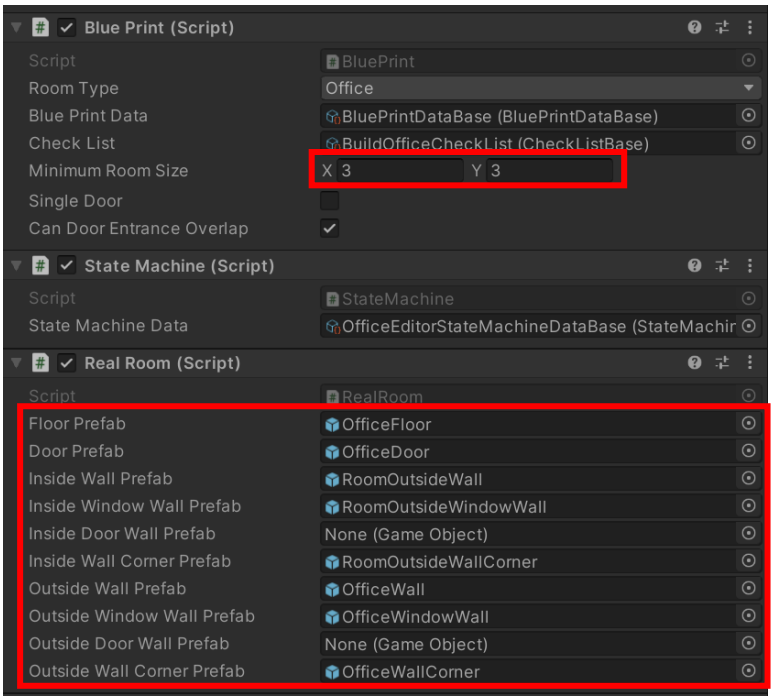




The office we edit in blue print mode has same properties with the room we edit in demo scene. You can change the minimum size of an office or replace its models by following the same methods mentioned in the "How To Add New Room" document. These properties are included in the components on an office prefab (This is a template

prefab for all offices) under:

Assets/RoomBuildingStarterKit/Assets/Prefabs/RealRoom/Office/Office.prefab



3. Save the office as a prefab

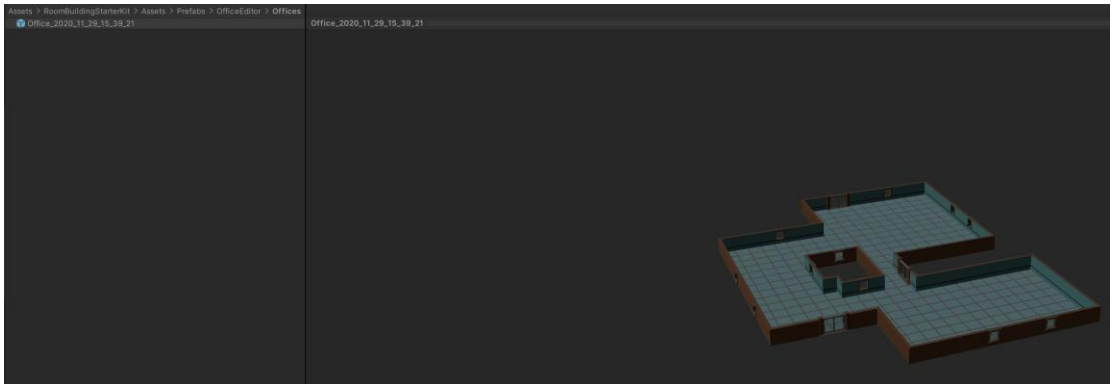
After build an office, we need to click Save button to save it to a prefab. The new prefab will be created under:

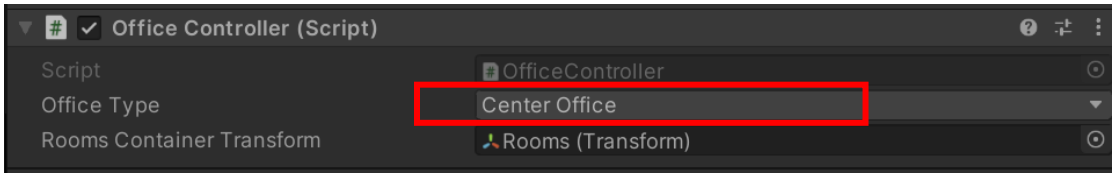
Assets/RoomBuildingStarterKit/Assets/Prefabs/OfficeEditor/Offices

By clicking the new office prefab, we could find its “Office Controller” script component in its inspector window. What we need to care about is the Office Type property. We need to manually add a new Office Type for it in script. Let’s open “OfficeController.cs” under:

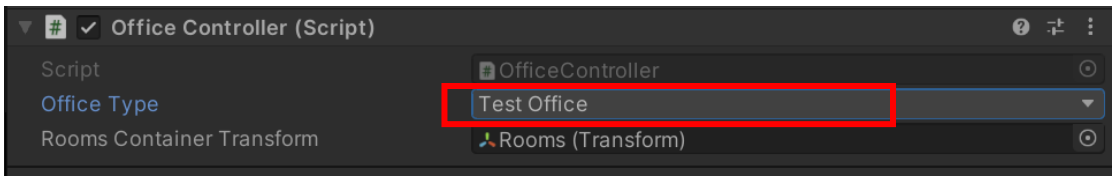
Assets/RoomBuildingStarterKit/Assets/Scripts/Components/OfficeController.cs

Inside the OfficeType enumerator, let’s add a new office type, here I name it as “TestOffice”, you can name it by yourself. Then in inspector window, we change the Office Type property to “Test Office”. Notice that you can rename the prefab, the default name consists of a “Office” prefix and saving time split by underscores.





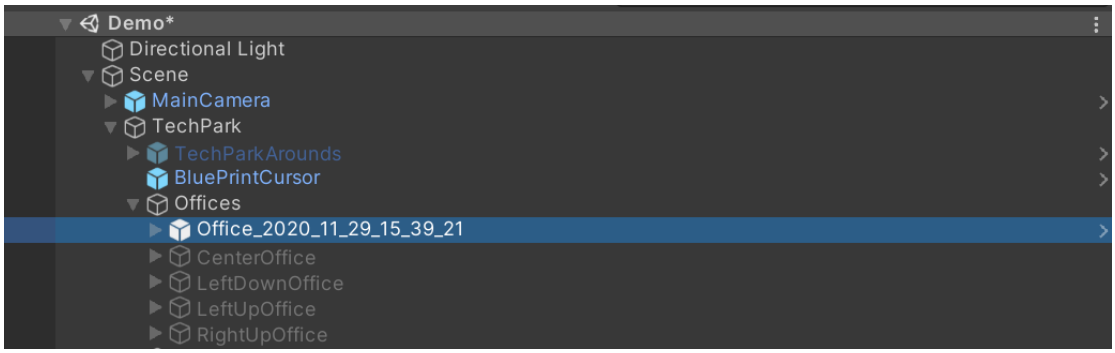

```
11      /// <summary>
12      /// The office types.
13      /// </summary>
        2 references | unknown, 56 days ago | 1 author, 2 changes
14      public enum OfficeType
15      {
16          CenterOffice,
17          LeftDownOffice,
18          LeftUpOffice,
19          RightUpOffice,
20
21          TestOffice,
22      }
```



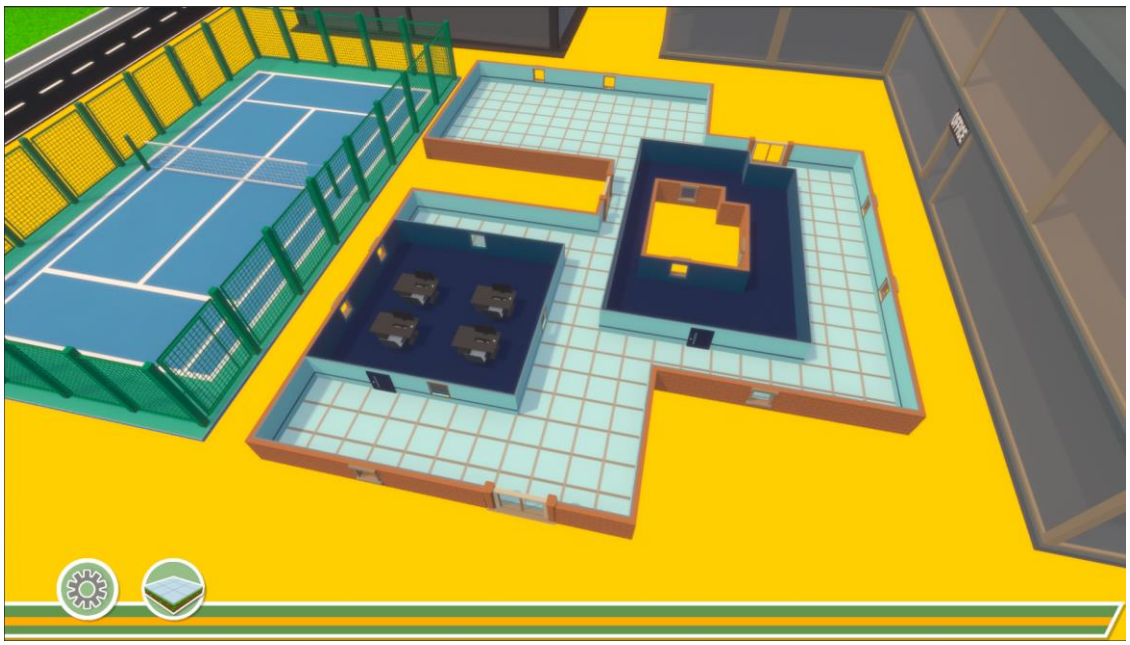
4. Drop the Office Prefab to Game Scene

After saving the office prefab, you can close the OfficeEditor scene, then go to demo scene to test your new office!

In the demo scene, **you have to drag and drop the new created office prefab under "Offices" game object same with other built-in offices**. This step is very important, because the "Offices" game object has the component needed by all the offices. You will get errors and wrong behaviors if you don't place your office prefab to the right place! After that, you can test your new office in the demo scene! That's all we need to do!


Demo*
Directional Light
Scene
MainCamera
TechPark
TechParkArounds
BluePrintCursor
Offices
Office_2020_11_29_15_39_21
CenterOffice
LeftDownOffice
LeftUpOffice
RightUpOffice

FURNITURE LIST
WINDOW $0
DOOR $0
SMALL TABLE $30
MIDDLE TABLE $80
LARGE TABLE $100
BOOK SHELF $30
Room can't build outside
Room can't overlap
The minimum room size is 3x3
Build a door
Doors at right place
Office doors could reach rooms
Windows at right place
Furnitures at right place



If I left something unclear or if you encounter any problem to this project. Please don’t hesitate to contact with me with:

Email: **hurrywon@163.com**
Discord: **https://discord.gg/J7JTGqcf3v**