

Dark Fantasy: Gigantic Environment documentation



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1 Introduction

Thank you for purchasing Dark Fantasy Gigantic Environment

Dark Fantasy Gigantic Environment documentation contains everything you need to get started.
If you have any questions, please contact us at **tropicalstudio3d@gmail.com**

How to use Dark Fantasy Gigantic Environment:

- Read chapter 2 (**Settings needed to use this asset**). [Link](#)
- Open demo scene to see example scene.
Dark_Fantasy > Demo > Demo_URP
or
Dark_Fantasy > Demo > Demo_Built-In
- Open showroom scenes to see all prefabs available in asset.
Dark_Fantasy > Demo > Showroom_Prefabs
Dark_Fantasy > Demo > Showroom_Prefabs_ReadyToUse
- Read chapter 4 to learn how to use snap with floor, walls and other prefabs. [Link](#)
- Read chapter 5 to learn about lighting. [Link](#)
- Read chapter 6 to learn how to optimize your scene. [Link](#)
- If you have a problem read chapter 7: troubleshooting [Link](#)

2 Settings

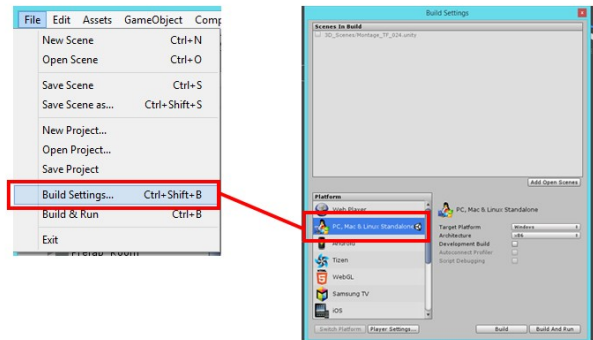
(Settings needed to use this project)

Important:

This settings are needing for URP (universal) or Built-in RP

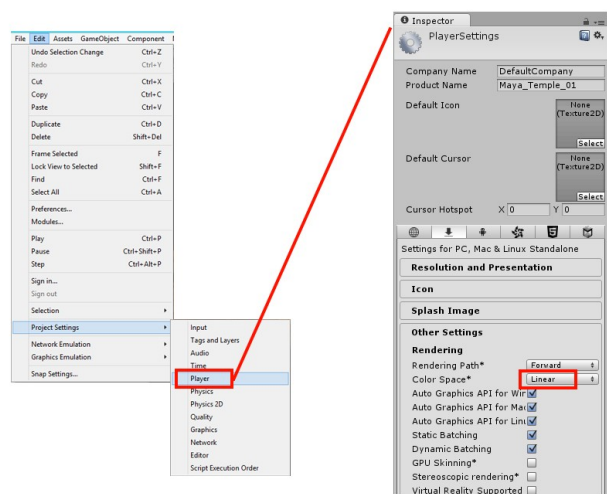
1 Go to **File > Build_Settings**.

Verify that **PC, Mac & Linux Standalone** mode is selected.



2 Open **Edit > Project Settings > Player**.

In Inspector window change **Color Space** to **Linear**



3 Go to **Edit > Grid and Snap Settings**.

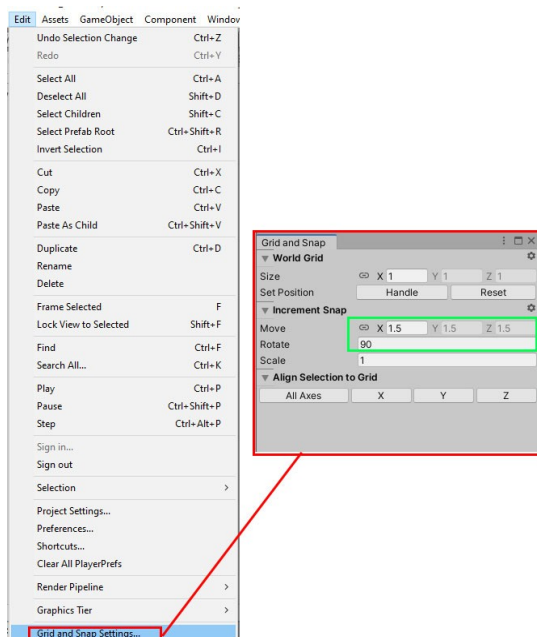
Adjust snap settings :

Move X: 1.5

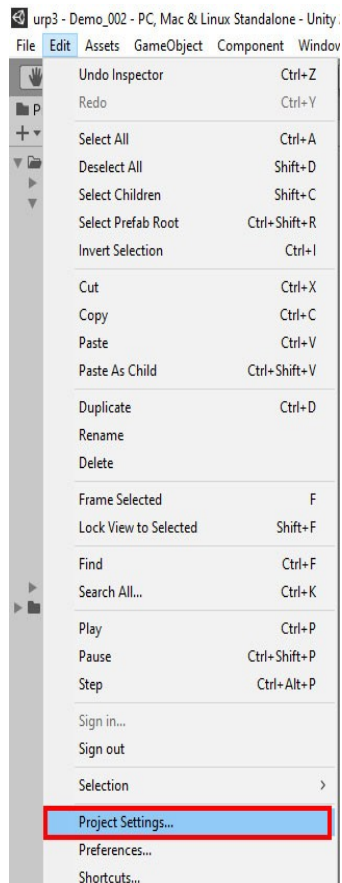
Move Y: 1.5

Move Z: 1.5

Rotation: 90



4 Go to **Edit > Project Settings**.



In project settings tab:

-Open **Quality** tab

-Select **High** (spot 1)

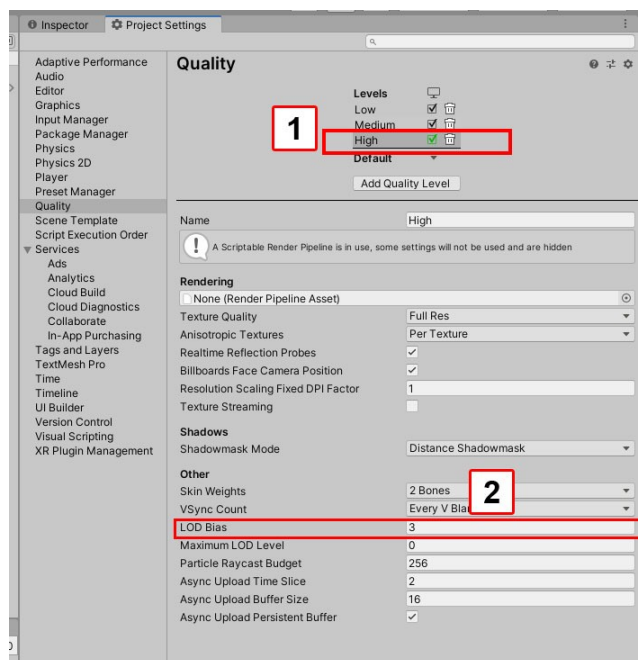
-Set **Lod Bias** to 3 (spot 1)

-Select **Medium**

-Set **Lod Bias** to 2

-Select **Low**

-Set **Lod Bias** to 1.5



Settings for URP

If you are using **URP** render pipeline (universal render pipeline) follow this step:

In folder Demo open **Demo_URP**

Dark_Fantasy > Demo > Demo_URP

In project settings tab:

1 Select **Graphics**

2 From project tab drag and drop **UniversalRenderPipelineAsset** to **scriptable Render Pipeline Settings** slot (spot 2)

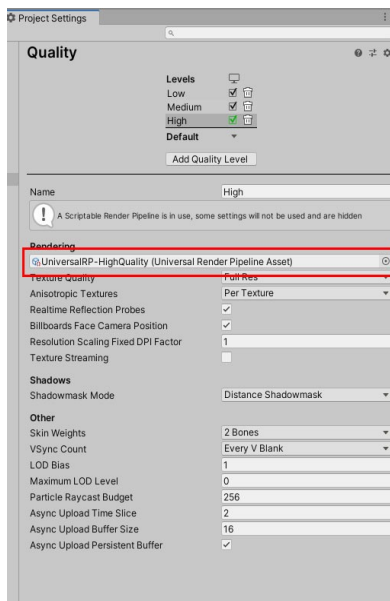
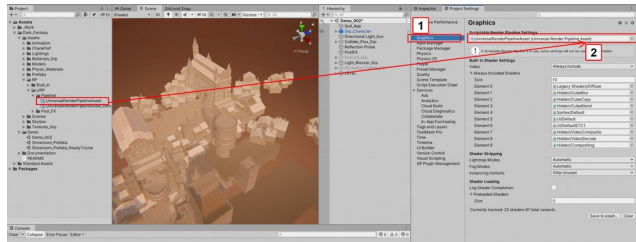
Dark_fantasy > Assets > RP > URP > Pipeline > UniversalRenderPipelineAsset

In project settings tab:

-Select **Quality**

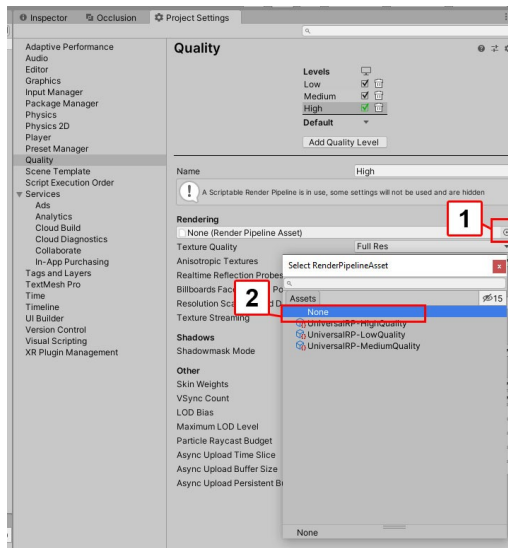
-In rendering slot if there is a render pipeline asset

we have to remove it (it may create conflict with dark fantasy render pipeline asset)



-Click on the **circle** icon (spot 1)

-Choose **none** (spot 2)



Settings for Built-In

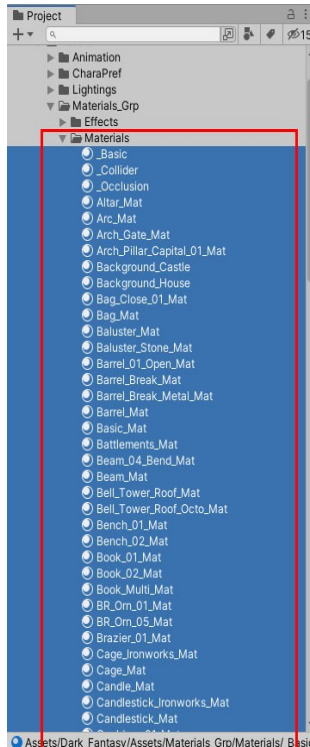
If you are using **Built-In** render pipeline follow this step:

In folder Demo open **Demo_BuiltIn**

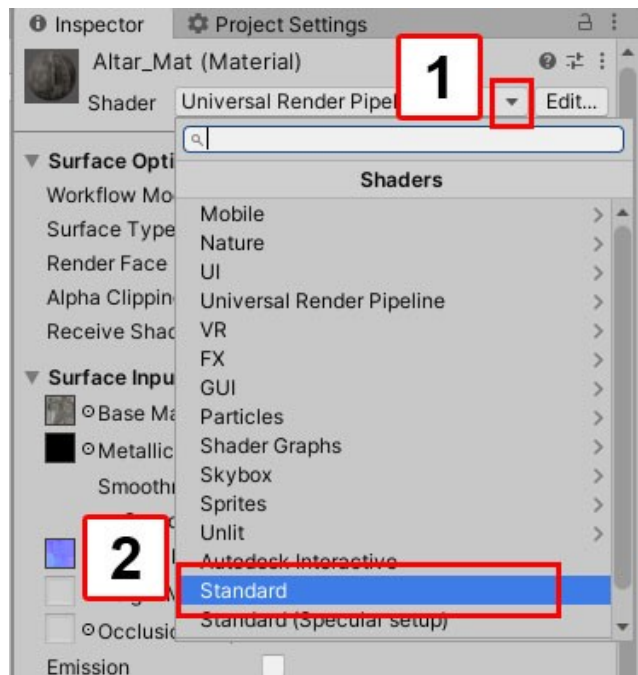
Dark_Fantasy > Demo > Demo_BuiltIn

1 In project tab select all materials in **materials** folder

Dark_fantasy > Assets > Materials_Grp > Materials

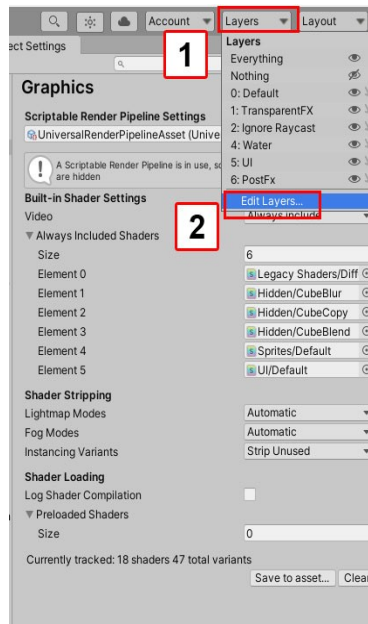


- 2 In inspector tab click the arrow icon (spot 1)
- 3 Choose **standard**

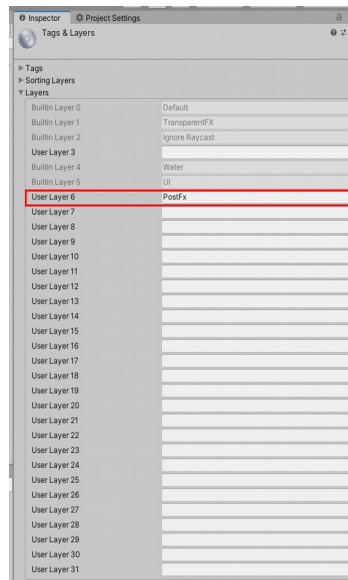


To use Camera Post Effects we need to create a new layer:

- Top right select **Layer** (spot 1)
- Press button **EditLayer** (spot 2)

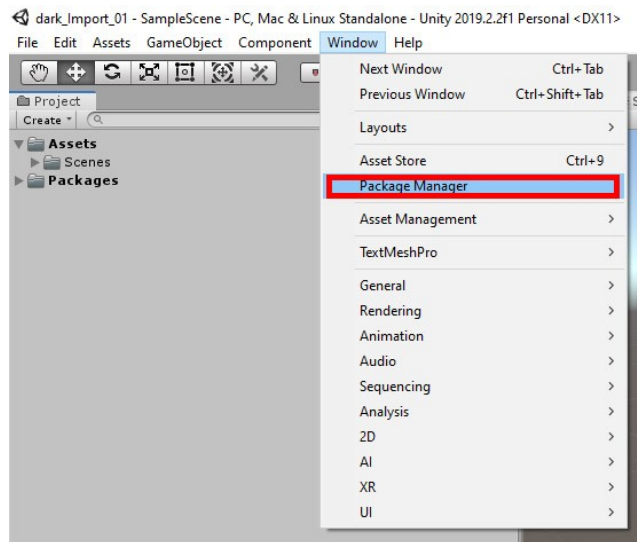


- Open inspector tab
- In **User Layer 6** slot create a new layer
Name it : **PostFx**

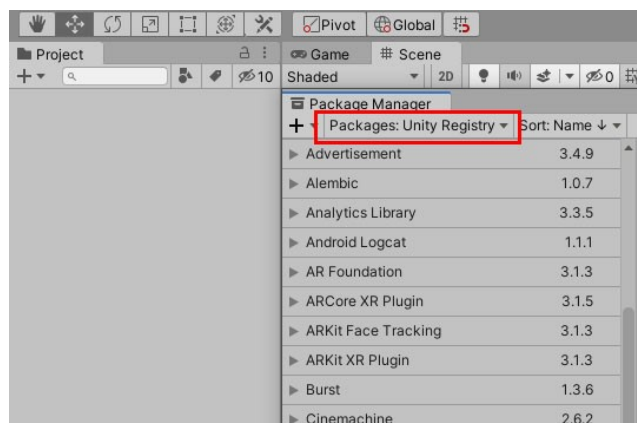


To use Camera Post Effects we need to install Post Processing Package

4 Go to **Window > Package Manager**

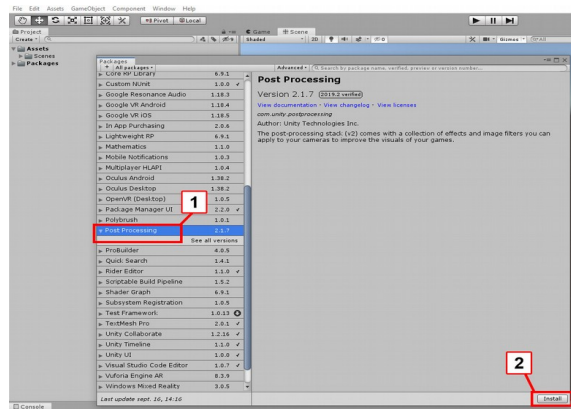


5 Select **Package: Unity Registry**



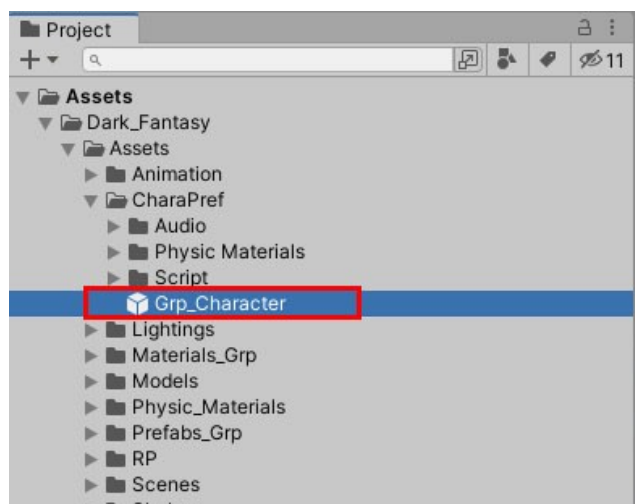
6 Select **Post-Processing** (spot 1)

7 Press button **Install** (spot 2)

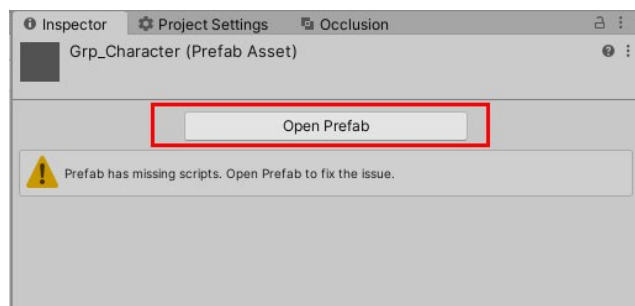


8 In project tab select **Grp_Character**

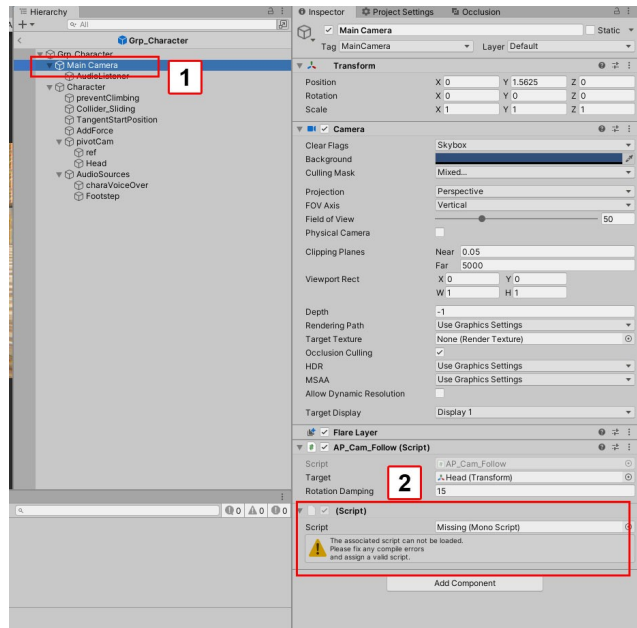
Dark_fantasy > Assets > CharaPref >
Grp_Character



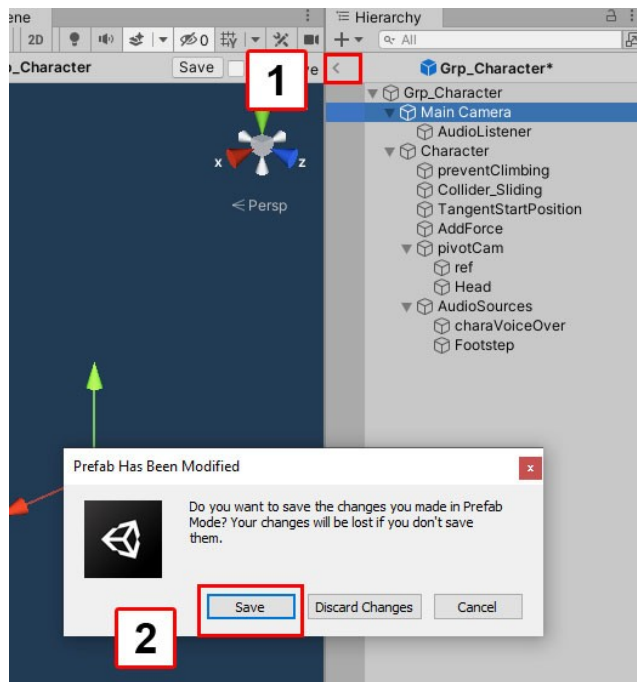
9 In Inspector tab press **Open prefab** button



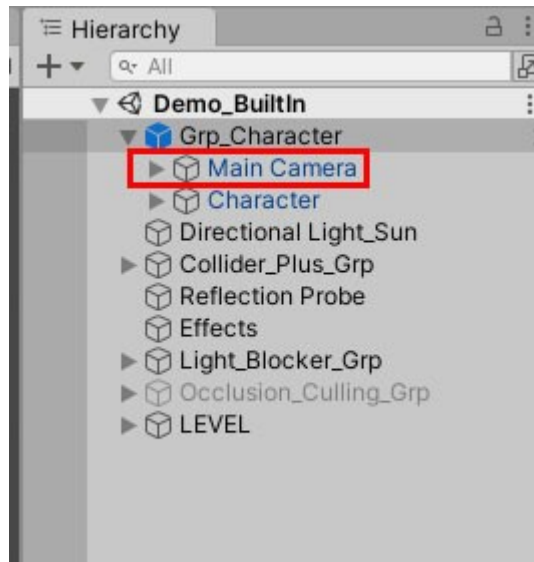
10 In hierarchy select **Main Camera** (spot 1)
In hierarchy delete missing script (spot 2)



11 Press **arrow** icon
-Press **yes** button if auto save is off

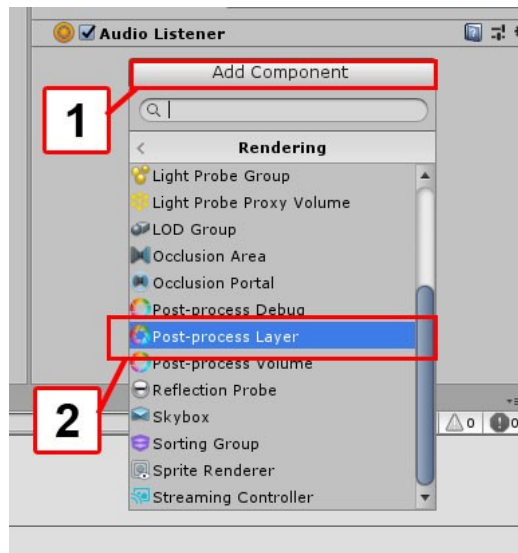


12 In hierarchy select **Main Camera**

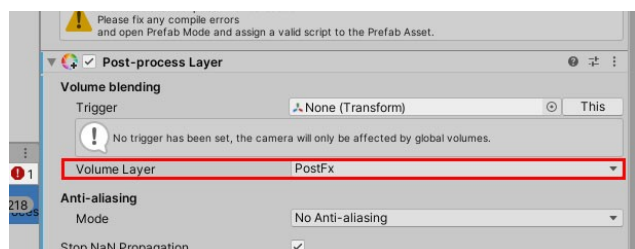


13 In Inspector tab press button **Add Component** (spot 1)

14 Choose **Rendering > Post-process Layer** (spot 2)



15 In **volume layer** slot select **PostFx** layer (spot 3)



16 Save scene

Info: if the effects doesn't appear in Demo BuiltIn , try to close and reopen the scene

3 Demo scenes

If you are using **URP** (universal) Render Pipeline:

In folder Demo open **Demo_URP**

Dark_Fantasy > Demo > Demo_URP

If you are using **Built-In** Render Pipeline:

In folder Demo open **Demo_BuiltIn**

Dark_Fantasy > Demo > Demo_BuiltIn

*Info : For **Demo_BuiltIn** you must calculate
Lightmaps*

Use the **arrow keys** on your keyboard to move your character.

Hold **M** to Run

Prefabs Showroom:

To discover all prefabs contained in this asset open scenes:

Dark_Fantasy > Demo > Showroom_Prefabs

Dark_Fantasy > Demo >

Showroom_Prefabs_ReadyToUse

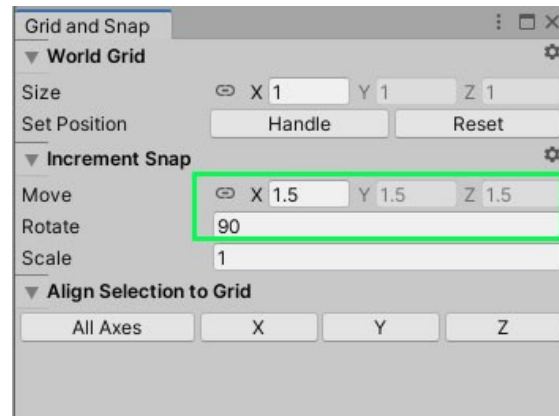
4 Create environment

Important Basics

CAUTION:

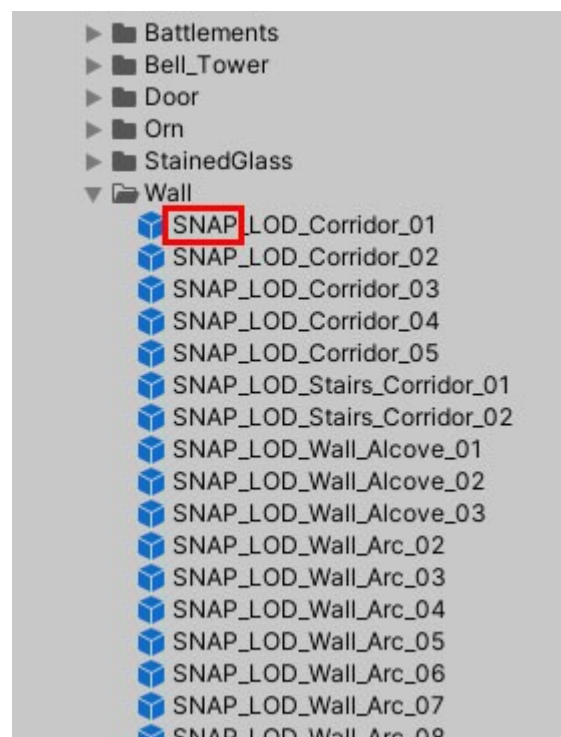
First don't forget to setup **Snap settings** (see chapter 2 for more information) [Link](#)

Note: For Tower prefabs, **Rotation** snap settings will be different (for more information [Link](#))



Important:

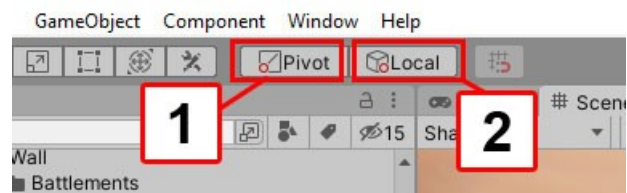
Many prefabs like walls, floors, roofs, fireplace, pillars and so on uses the snap system. The prefabs that use the snap have the prefix **"SNAP"** at the beginning of their name.



CAUTION:

When you move an object with **"SNAP"** prefix be sure to select:

- **Pivot** mode (spot 1)
- **Global** mode (spot 2)



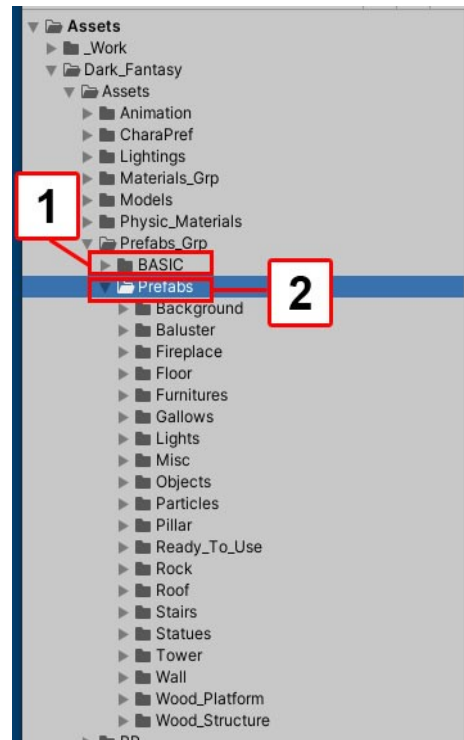
Important:

Preferably, do not use the prefabs contained in **BASIC** folder (spot 1)

These prefabs are not useful as is.
They serve as a basis for building the useful prefabs.

Use prefabs included in **Prefabs** Folder

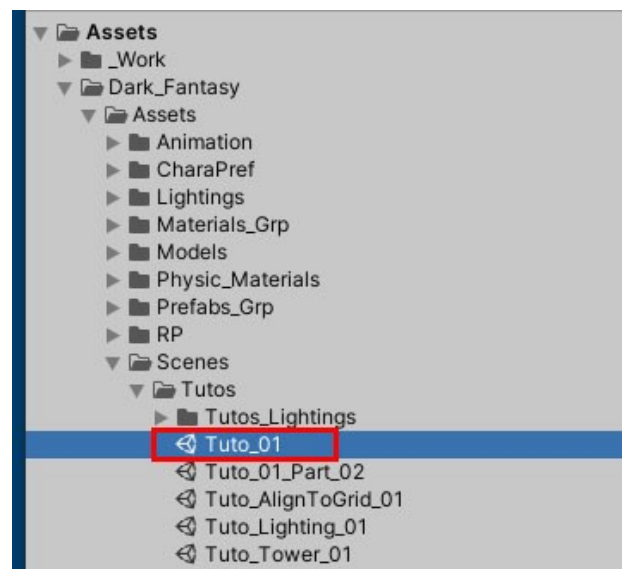
Dark_Fantasy > Assets > Prefabs_Grp > Prefabs



Tutorial: Walls and floors modules

1 Open scene: Tuto 01

Dark_fantasy > Assets > Scenes > Tutos > Tuto_01

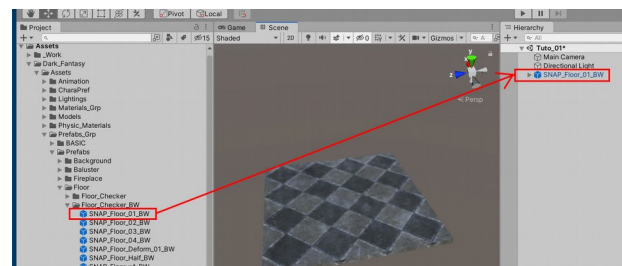


2 From Project tab:

Drag and drop **SNAP_Floor_01_BW** in hierarchy tab

Dark_Fantasy > Assets > Prefabs_Grp > Prefabs > Floor > Floor_Checker_BW > SNAP_Floor_01_BW

Important:



To snap a prefab on the grid:

you must drag and drop the object directly in the hierarchy tab.

Caution: If you drag the prefab directly into the scene, it **will not align on the grid**.

3 In the same way from Project tab:

Drag and drop **SNAP_Floor_02_BW** in hierarchy tab

Dark_Fantasy > Assets > Prefabs_Grp > Prefabs>
Floor > Floor_Checker_BW > SNAP_Floor_02_BW

4 Press the **W** key to switch to the Move mode.

5 In scene view **while keeping the CTRL key (Command on Mac) pressed** move **SNAP_Floor_02_BW** on Z axis **twice**.

Important:

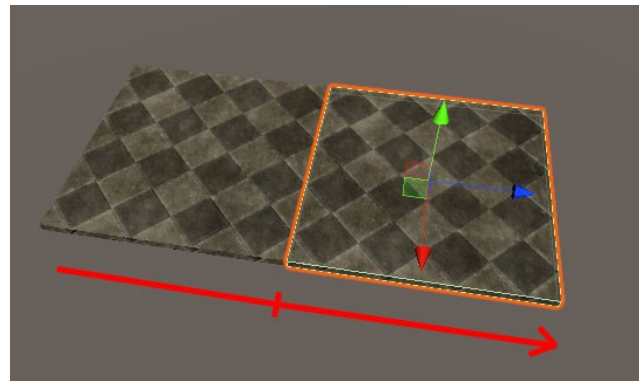
*When an object is moved while holding down the **Ctrl key (Command on Mac)** the snapping mode is used*

*The position of **SNAP_Floor_02_BW** must be*

X: 0

Y: 0

Z: 3

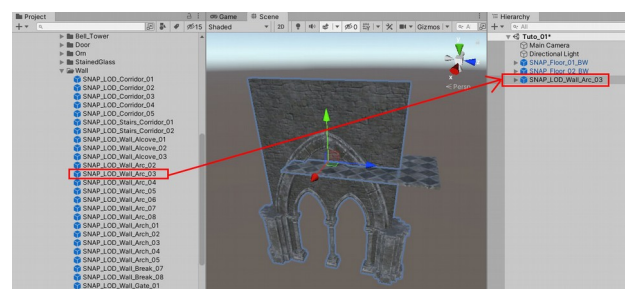


In the same way as the floors, the walls uses the snap system

6 From Project tab:

Drag and drop **SNAP_LOD_Wall_Arc_03** in hierarchy tab

Dark_Fantasy > Assets > Prefabs > Wall > Wall>
SNAP_LOD_Wall_Arc_03



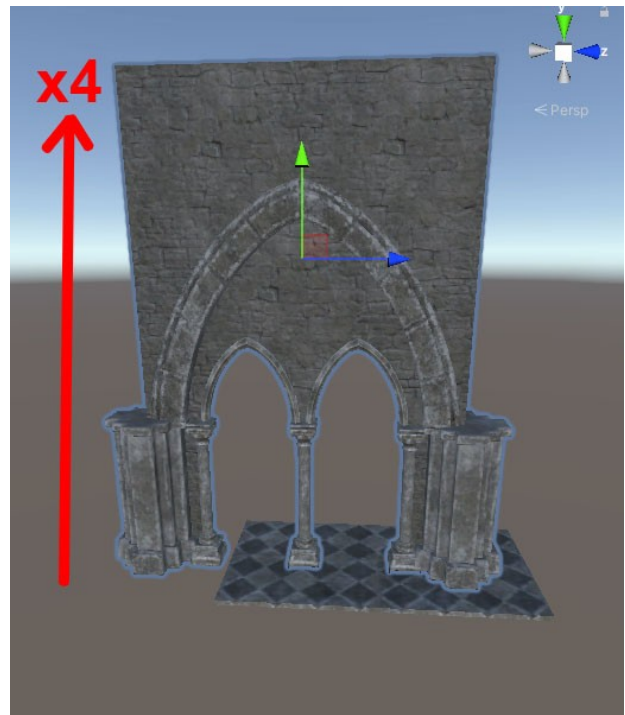
7 While keeping the **CTRL** key pressed move **SNAP_LOD_Wall_Arc_03** on Y axis **4 times**

*The position of **SNAP_LOD_Wall_Arc_03** must be*

X: 0

Y: 6

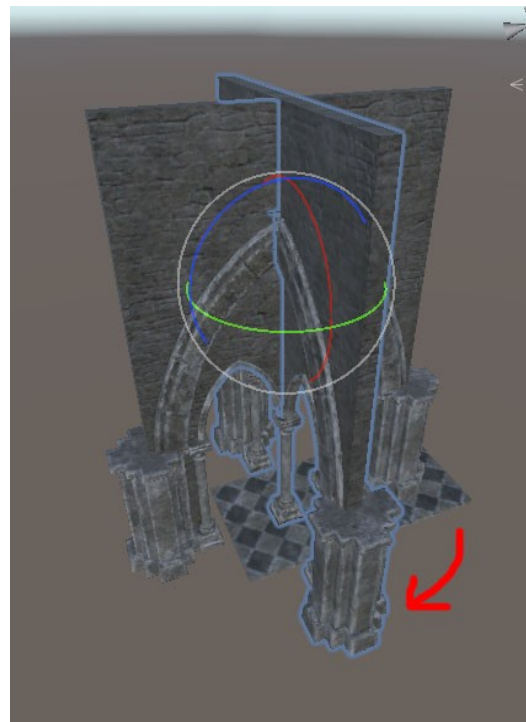
Z: 0



8 Duplicate **SNAP_LOD_Wall_Arc_03** by pressing **CTRL + D**

9 Press the **E** key to switch to the Rotate mode.

10 While keeping the **CTRL** key pressed rotate **SNAP_LOD_Wall_Arc_03 (1)** on Y axis **once**.

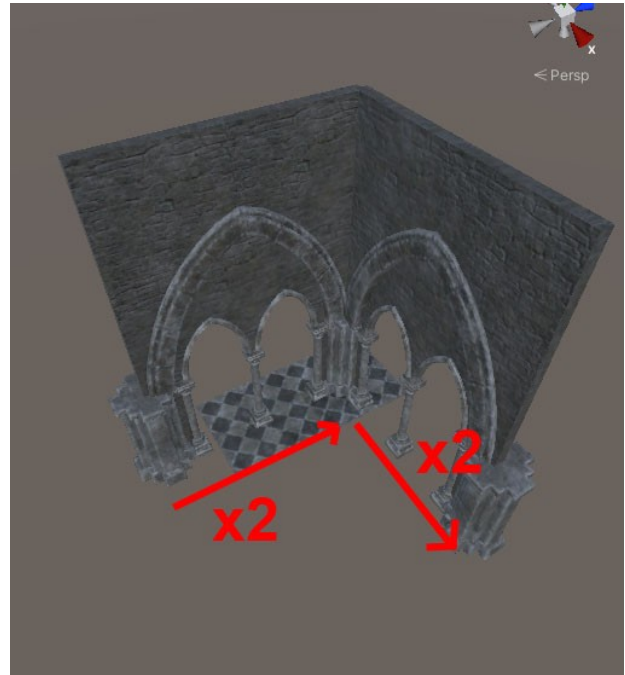


11 Press the **W** key to switch to the Move mode.

12 While keeping the **CTRL** key pressed
- move **SNAP_LOD_Wall_Arc_03 (1)** on X axis **2**
times

- move **SNAP_LOD_Wall_Arc_03 (1)** on Z axis
2 times

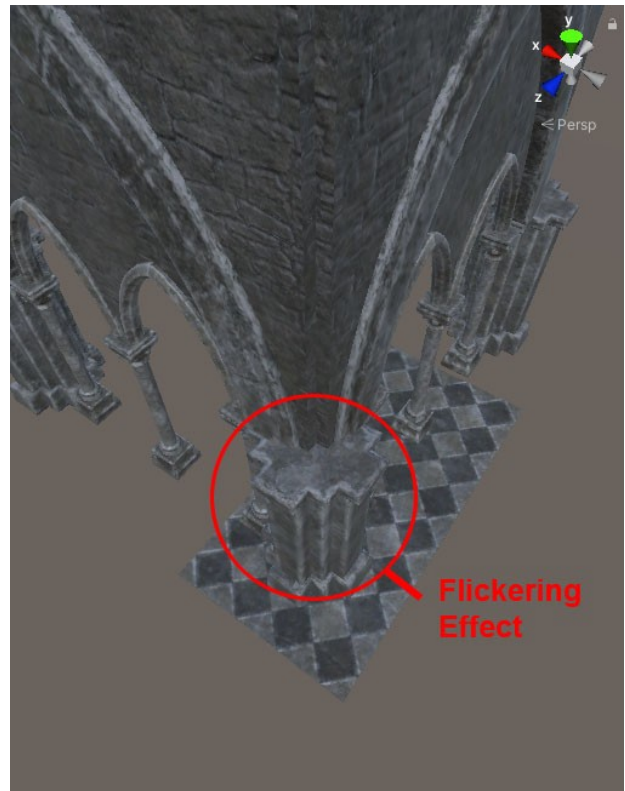
*The position of **SNAP_LOD_Wall_Arc_03 (1)** must be*
X: 3
Y: 6
Z: 3



Important :

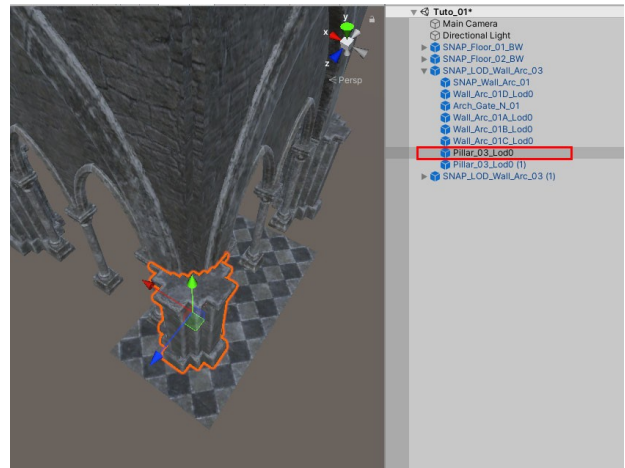
If you look at the pillars, you will see that it flickers (move the camera from left to right in the scene view). What is causing the problem is that the 2 pillars are exactly at the same position

The solution is to hide one of the pillar.

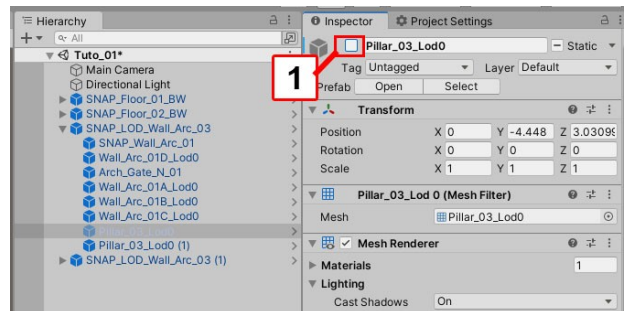


In hierarchy tab select **Pillar_03_Lod0** (in SNAP_LOD_Wall_Arc_03 prefabs)

SNAP_LOD_Wall_Arc_03 > Pillar_03_Lod0



In Inspector tab uncheck **Pillar_03_Lod0** visibility box (spot 1)



Important:

Without breaking a prefabs it is possible to

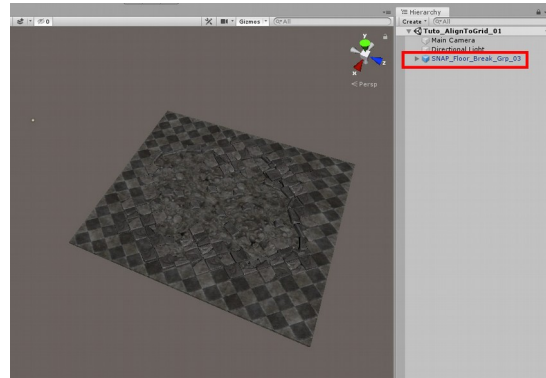
- hide / unhide object included in the prefab
- move, rotate, scale an object included in the prefab

Tutorial: Correctly align an object on the grid

If you forgot to use the snap to move an object (for example a wall) here is a method to reset the object on the grid.

1 Open scene: **Tuto_AlignToGrid_01**
Dark_fantasy > Assets > Scenes > Tutos >
Tuto_AlignToGrid_01

2 **SNAP_LOD_Floor_Break_03_BW** was not moved using the snap.
So we're going to realign it on the grid.

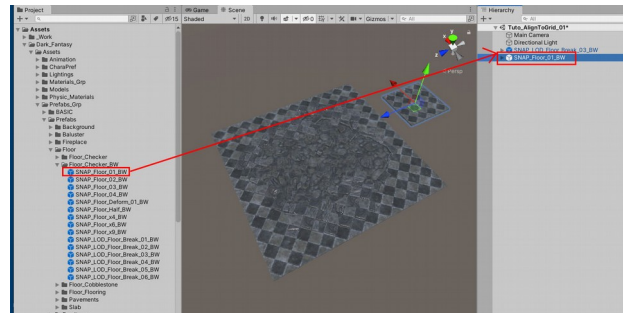


3 From Project tab:
Drag and drop **SNAP_Floor_01_BW** in hierarchy tab

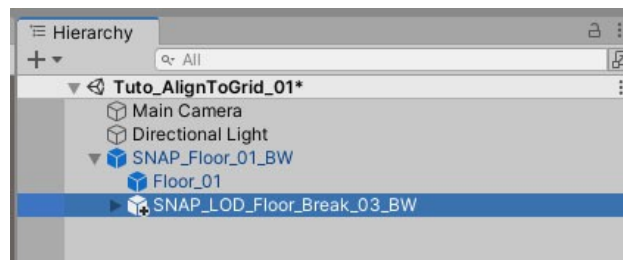
Dark_Fantasy > Assets > Prefabs_Grp > Prefabs > Floor > Floor_Checker_BW > SNAP_Floor_01_BW

Remember:

To snap a prefab on the grid: **you must** drag and drop the object directly in the hierarchy tab.

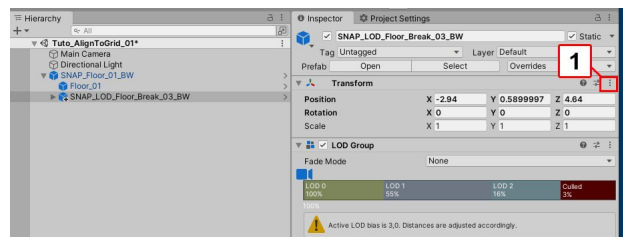


4 Put **SNAP_LOD_Floor_Break_03_BW** in **SNAP_Floor_01_BW**

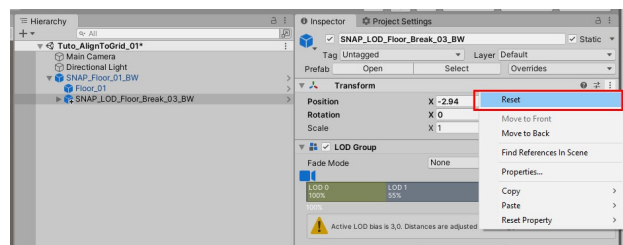


5 Select **SNAP_LOD_Floor_Break_03_BW**

6 Click on the triangle next to the 3 points icon (spot 1)

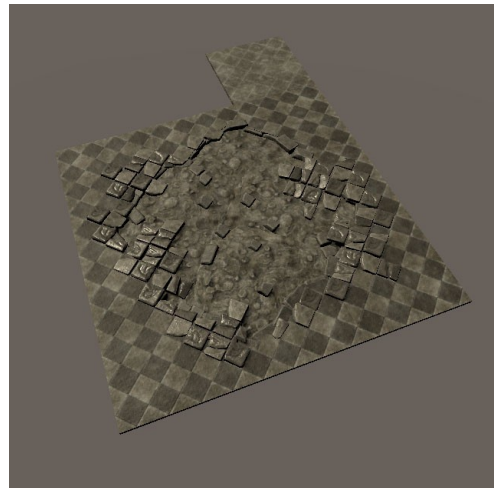


7 Click on **reset** (spot 2)



8 Take out **SNAP_LOD_Floor_Break_03_BW** from **SNAP_Floor_01_BW**

Now **SNAP_LOD_Floor_Break_03_BW** is snap on the grid

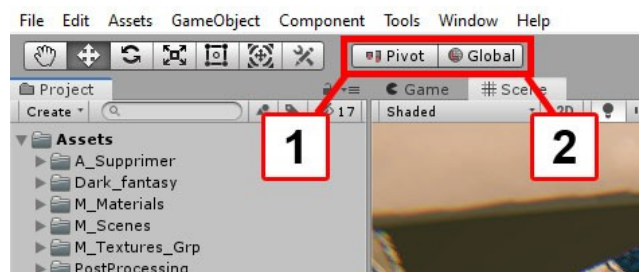


Tower

DON'T FORGET:

When you move an object with "**SNAP**" prefix be sure to select:

- **Pivot** mode (spot 1)
- **Global** mode (spot 2)

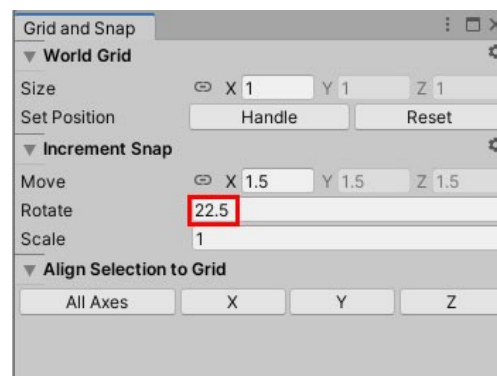


Important :

Tower prefabs use another rotate snap parameter

Adjust snap settings :

Rotation: 22.5



There are ready to use towers but if you want to create your own one use the prefabs

Tower_04_KIT.

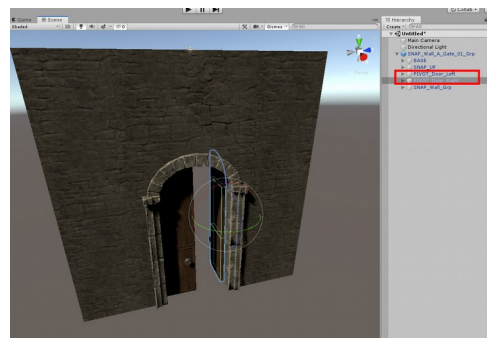
Dark_Fantasy > Assets > Prefabs_Grp > Prefabs >
Tower > Tower_04_KIT

All the components of the towers are included in it.

Prefabs in details

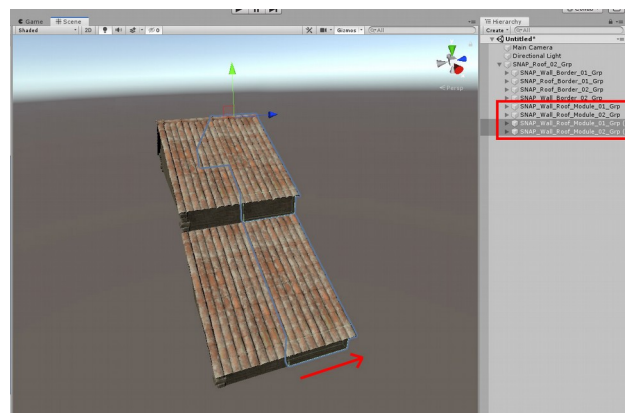
Door:

To open a door :
Rotate the object **PIVOT_Door_Right** (or
PIVOT_Door_Left)



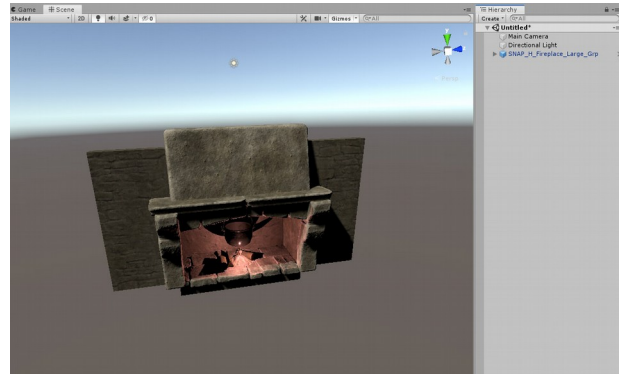
Roofs:

You can easily extend the roof by duplicating
some modules then using the snap



Fireplace:

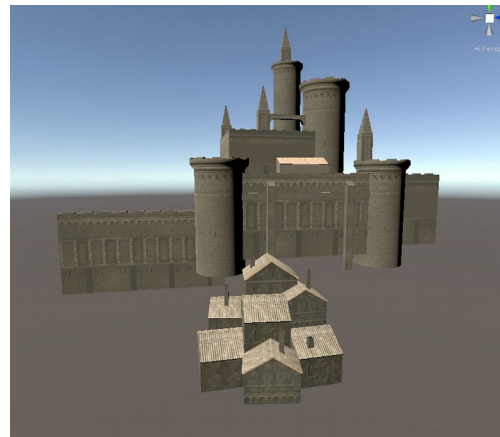
you can easily incorporate a fireplace into a wall using the snap



Background:

Prefabs contained in the background folder must be placed far from the camera.

Dark_Fantasy > Assets > Prefabs > Background

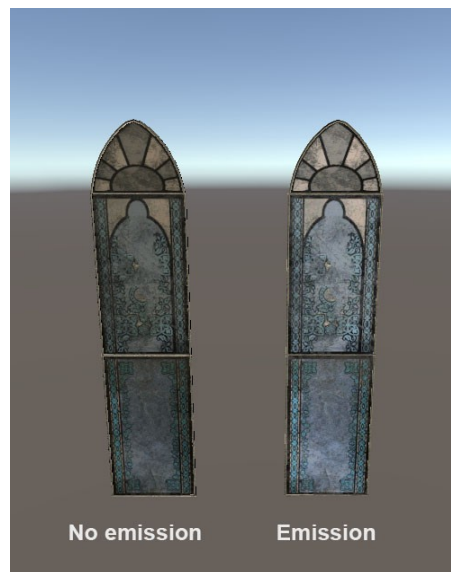


Stained glass:

Each side of the stained glass has a specific material:

Outside: without emission

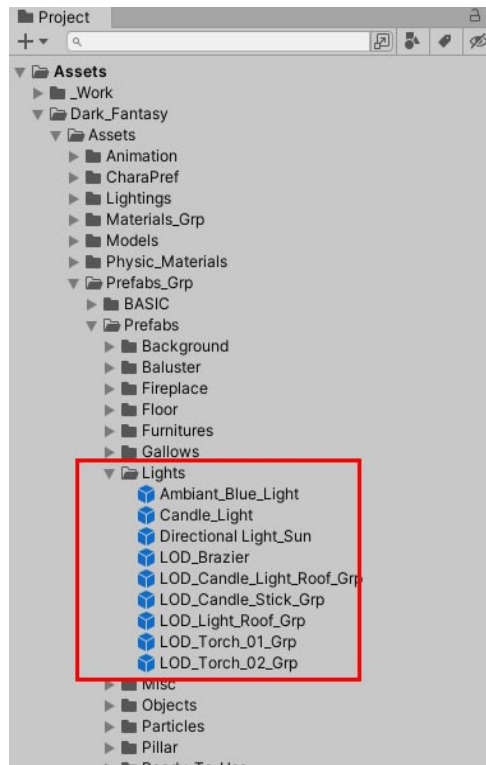
For the interior: with emission



5 Lighting

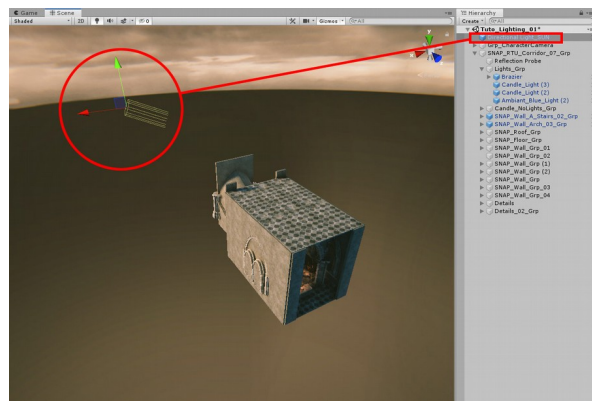
Lights prefabs are in prefabs folder

Dark_fantasy > Assets > Prefabs_Grp > Prefabs > Lights



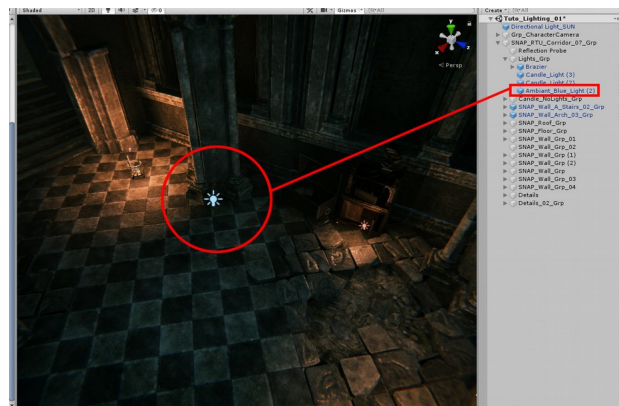
The exteriors are illuminated by a directional light

Dark_fantasy > Assets > Prefabs_Grp > Prefabs > Lights > Directional Light_Sun

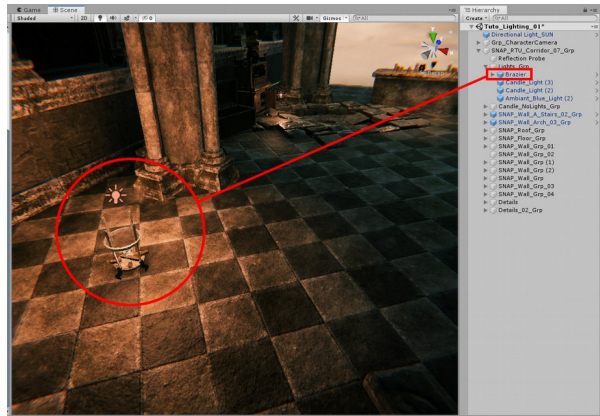


To avoid the interior being too dark, blue lights are placed at regular intervals

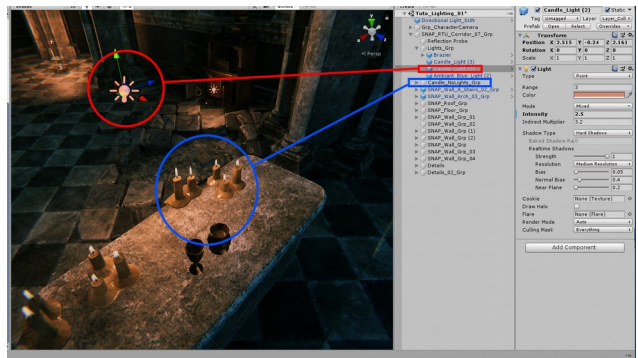
Dark_Fantasy > Assets > Prefabs > Lights > Ambient_Blue_Light



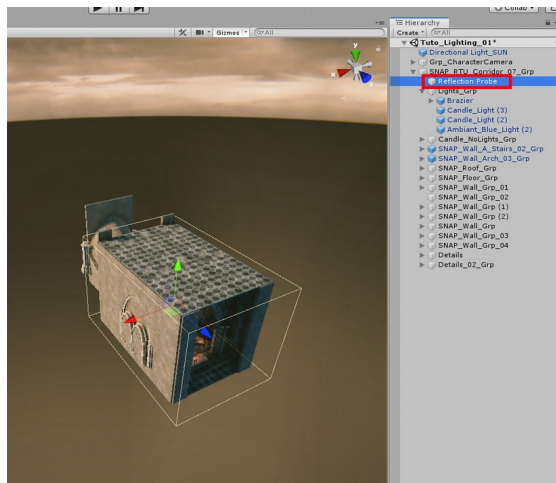
Then we put the lamps



For candles, we place a single light (Candle_Light) for several candles models



Place a reflection prob that encompasses the entire room

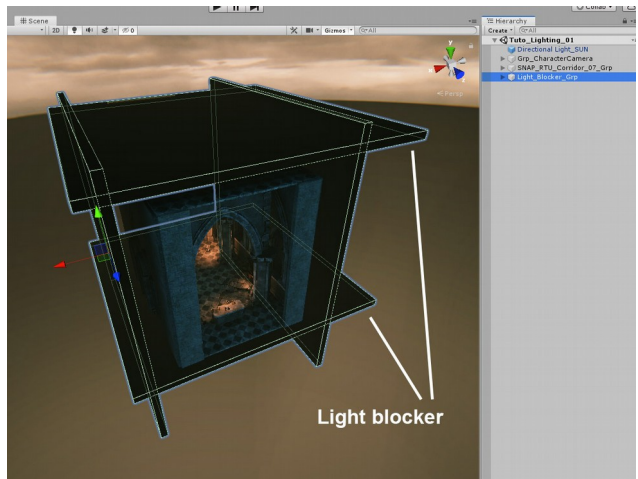


If you have non static object (for example character, enemy ,moving door) don't forget to use light probe group.

Tips:

In the interiors there may be lights artifacts .
To solve this problem we can use a "light blocker" prefab.

Dark_Fantasy > Assets > Prefabs > Misc >
Light_Blocker_N



6 Optimization

Occlusion culling:

Occlusion culling:

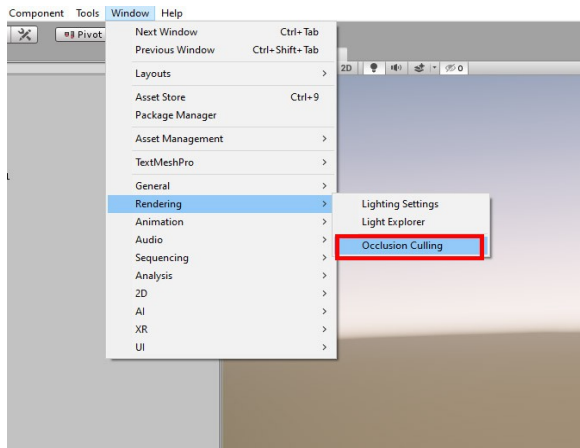
Prefabs with **Occludee static** tag are not displayed :for example an objects behind a wall (the wall is tag with **Occluder static**).

To occlude object you can use **Occlusion_Plane** included in prefabs folder.

Dark_Fantasy > Assets > Prefabs > Misc > Occlusion_Plane

Occlusion culling setup:

1 Go to **Window > Rendering > Occlusion Culling**



2 Press button **Bake** at the top of the occlusion window (spot 1)

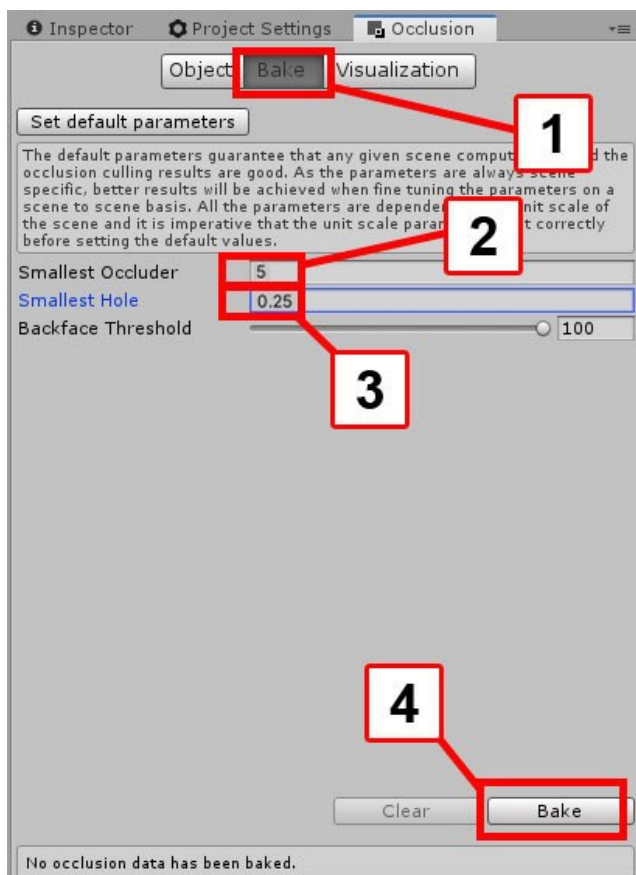
3 Set **Smallest Occluder** to **5** (spot 2)

4 Set **Smallest Hole** to **0.25** (spot 3)

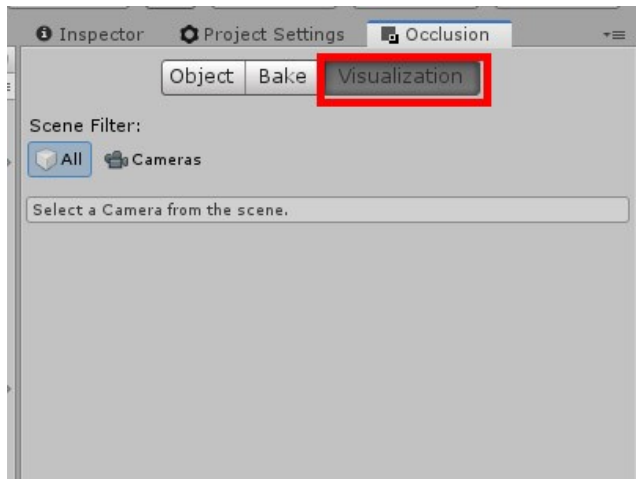
These are the parameters used for the demo scene.

5 Press button **Bake** (spot 1)

Wait until the process is complete



6 Press button **visualization** to see the result



7 Important : Save your scene

7 Troubleshooting

I have flashing /flickering effects on some objects.

There are two similar objects exactly at the same position.
For more informations [Link](#)

Walls and floors do not connect properly.

You must use snap.
More informations about how to setup snap [Link](#)
More informations about how to use snap [Link](#)

Wrongly, I moved an object without using the snap. How to correctly align this object on the grid

For more informations [Link](#)

Snap doesn't work with towers prefabs.

Snap rotation parameter is different for tower
For more informations [Link](#)

How to quickly create a level ?

You can use Ready_to_Use prefabs :
Dark_Fantasy > Assets > Prefabs > Ready_To_Use

Materials are all pink ?

If you are using URP:
From project tab drag and drop **UniversalRenderPipelineAsset** to **scriptable Render Pipeline Settings** slot [Link](#)

If you are using Built-in:
Convert materials to Standard shader [Link](#)

I have some light artifacts in the interiors

Use "**Light blocker**" prefab.
Dark_Fantasy > Assets > Prefabs > Misc > Light_Blocker_N
For more informations [Link](#)