Importing 3D Models

Finding Free Models

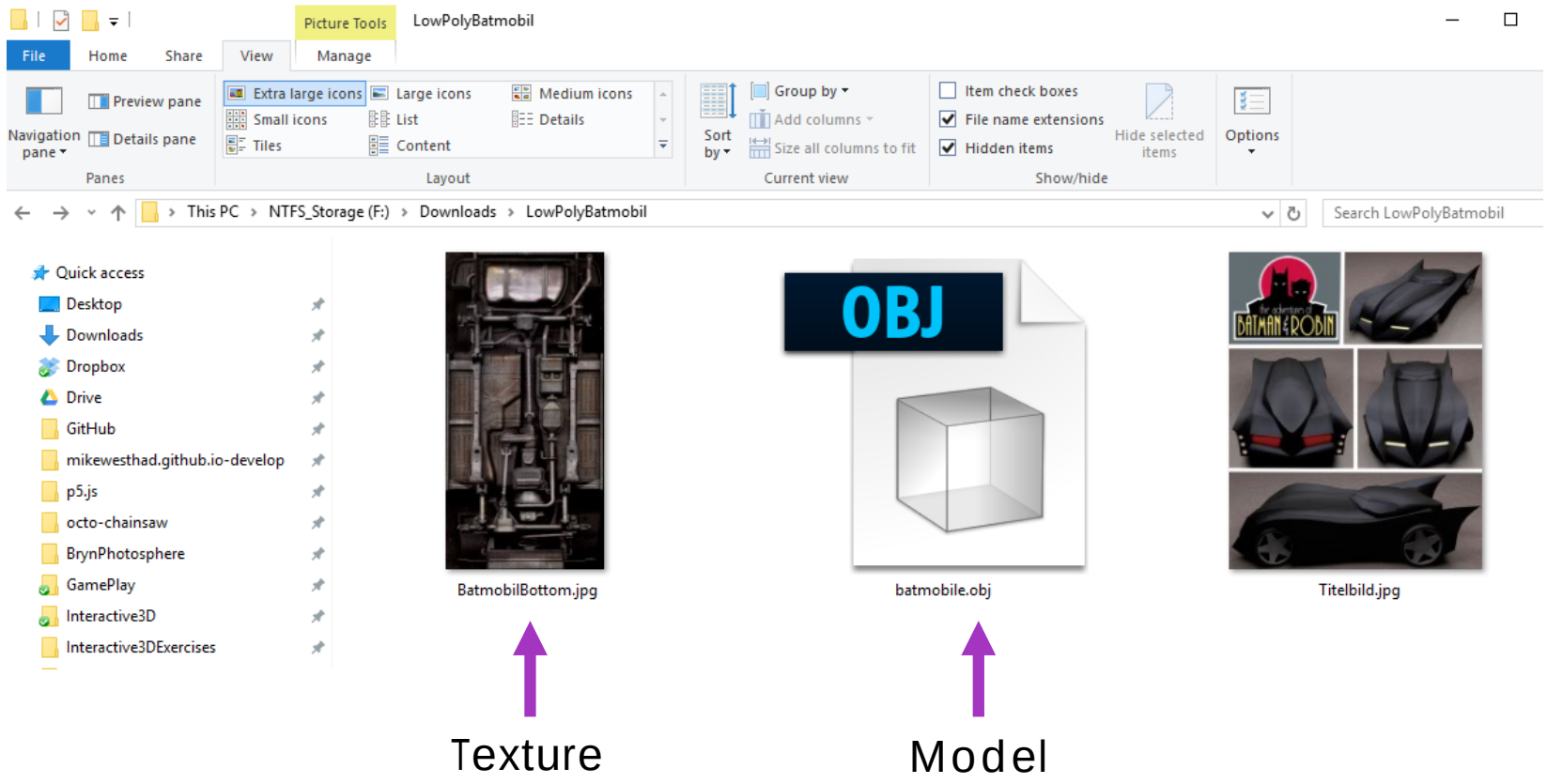
- TF3DM
- Google's 3D Warehouse
- "3D Models" on Unity Asset Store
- TurboSquid free models
- OpenGameArt 3D section
- Blend Swap

Unity 3D

- Natively supports the following formats:
  - .fbx, .obj, .dae, .3ds, .dxf
- Proprietary formats:
  - Max, Maya, Blender, Cinema4D, Modo, Lightwave, Cheetah3D, Sketchup
  - Supported if you have the software installed
- Importing guide
  - Has tips for importing each format

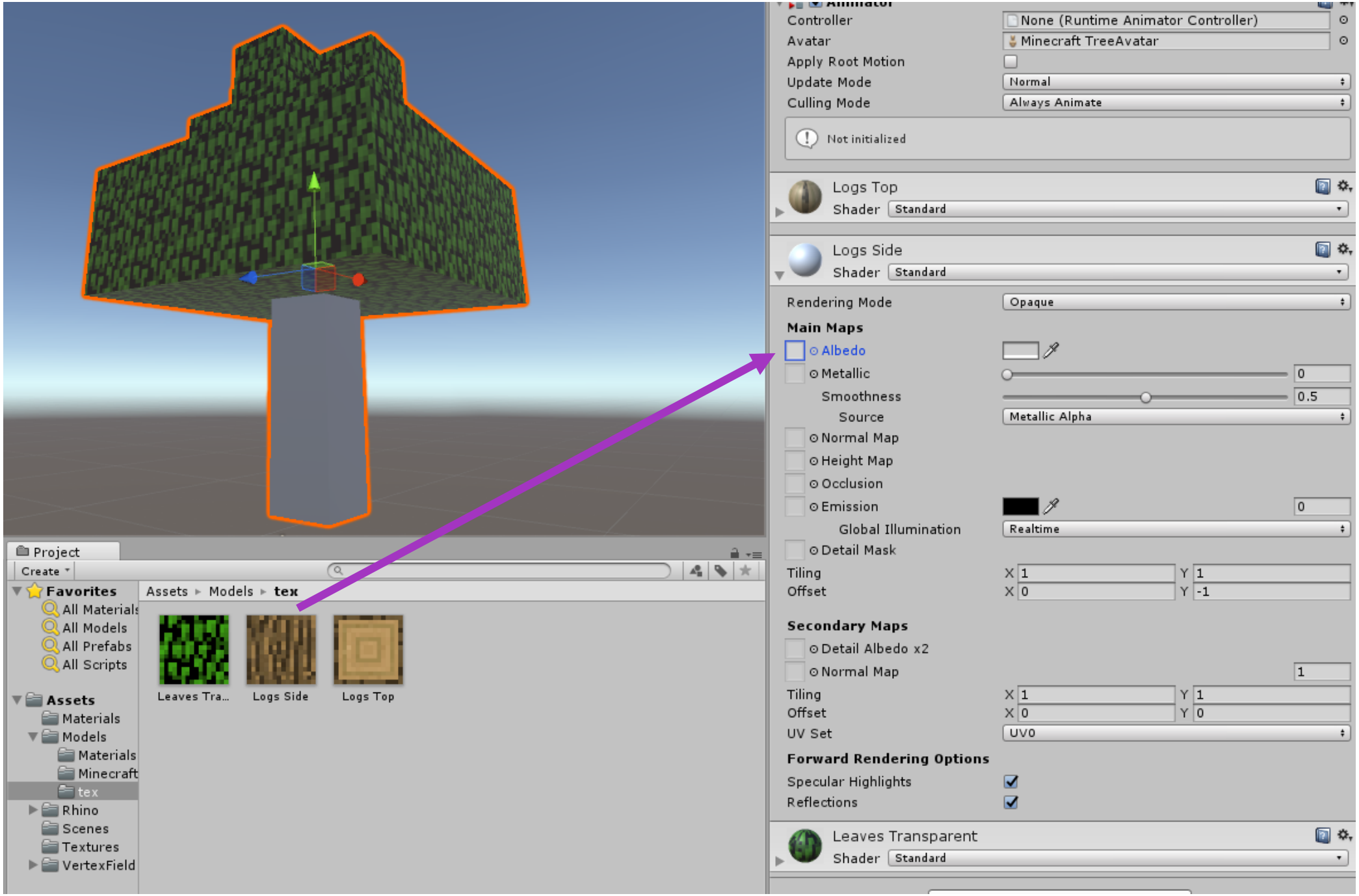
Importing Textures

- When importing, be sure to bring the textures over:



Importing Textures

- Textures won’t always be imported properly.
- When that happens, manually assign the textures for the various materials on your model.


Controller
None (Runtime Animator Controller)
Avatar
Minecraft TreeAvatar
Apply Root Motion
Update Mode
Normal
Culling Mode
Always Animate
Not initialized
Logs Top
Shader
Standard
Logs Side
Shader
Standard
Rendering Mode
Opaque
Main Maps
Albedo
Metallic
0
Smoothness
0.5
Source
Metallic Alpha
Normal Map
Height Map
Occlusion
Emission
0
Global Illumination
Realtime
Detail Mask
Tiling
X 1
Y 1
Offset
X 0
Y -1
Secondary Maps
Detail Albedo x2
Normal Map
1
Tiling
X 1
Y 1
Offset
X 0
Y 0
UV Set
UV0
Forward Rendering Options
Specular Highlights
Reflections
Leaves Transparent
Shader
Standard
Project
Create
Favorites
All Materials
All Models
All Prefabs
All Scripts
Assets
Materials
Models
Materials
Minecraft
tex
Rhino
Scenes
Textures
VertexField
Assets ▸ Models ▸ tex
Leaves Tra...
Logs Side
Logs Top

Project

Create

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tex
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Scenes
Textures
VertexField

Assets ▸ Models ▸ tex

Leaves Tra...
Logs Side
Logs Top

Anchor Override: None (Transform)

Animator
Controller: None (Runtime Animator Controller)
Avatar: Minecraft TreeAvatar
Apply Root Motion
Update Mode: Normal
Culling Mode: Always Animate
Not initialized

Logs Top
Shader: Standard

Logs Side
Shader: Standard

Rendering Mode: Opaque

Main Maps
Albedo
Metallic: 0
Smoothness: 0.5
Source: Metallic Alpha
Normal Map
Height Map
Occlusion
Emission: 0
Global Illumination: Realtime
Detail Mask
Tiling: X 1 Y 1
Offset: X 0 Y -1

Secondary Maps
Detail Albedo x2
Normal Map: 1
Tiling: X 1 Y 1
Offset: X 0 Y 0
UV Set: UV0

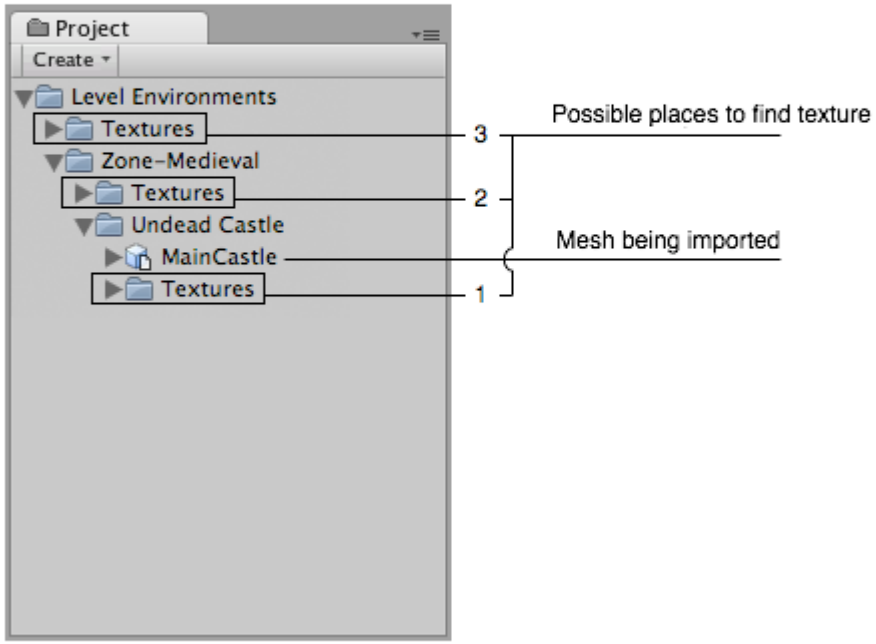
Forward Rendering Options
Specular Highlights
Reflections

Leaves Transparent
Shader: Standard

Importing Textures

Textures

Unity will attempt to find the textures used by a mesh automatically on import by following a specific search plan. First, the importer will look for a sub-folder called Textures within the same folder as the mesh or in any parent folder. If this fails, an exhaustive search of all textures in the project will be carried out. Although slightly slower, the main disadvantage of the exhaustive search is that there could be two or more textures in the project with the same name. In this case, it is not guaranteed that the right one will be found.



Place your textures in a **Textures** folder at or above the asset's level

Pain Points

- High resolution meshes
- Textures/materials not importing

Leupold Mk4 CQ/T

High Poly

373 414 Polygons

Low Poly

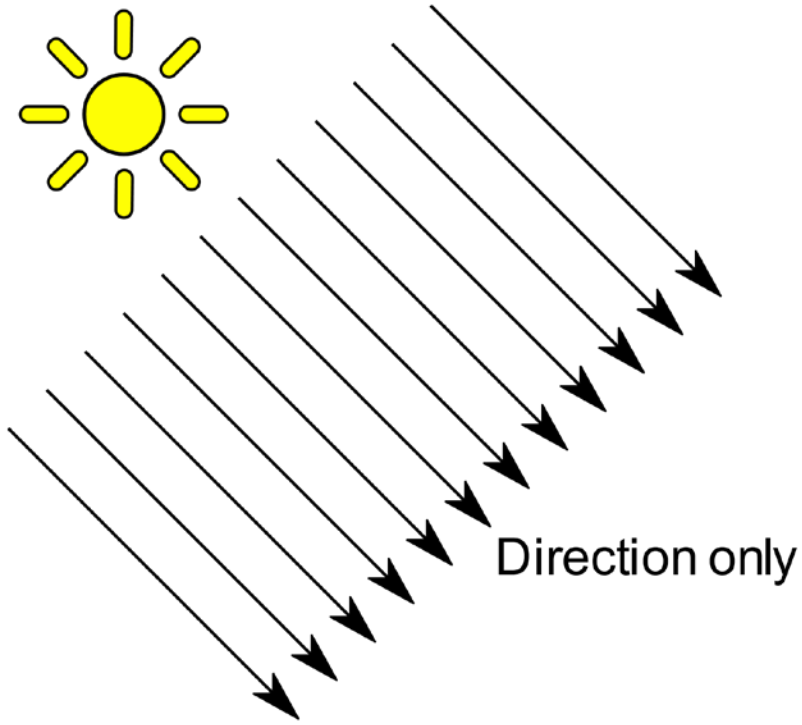
1542 Polygons

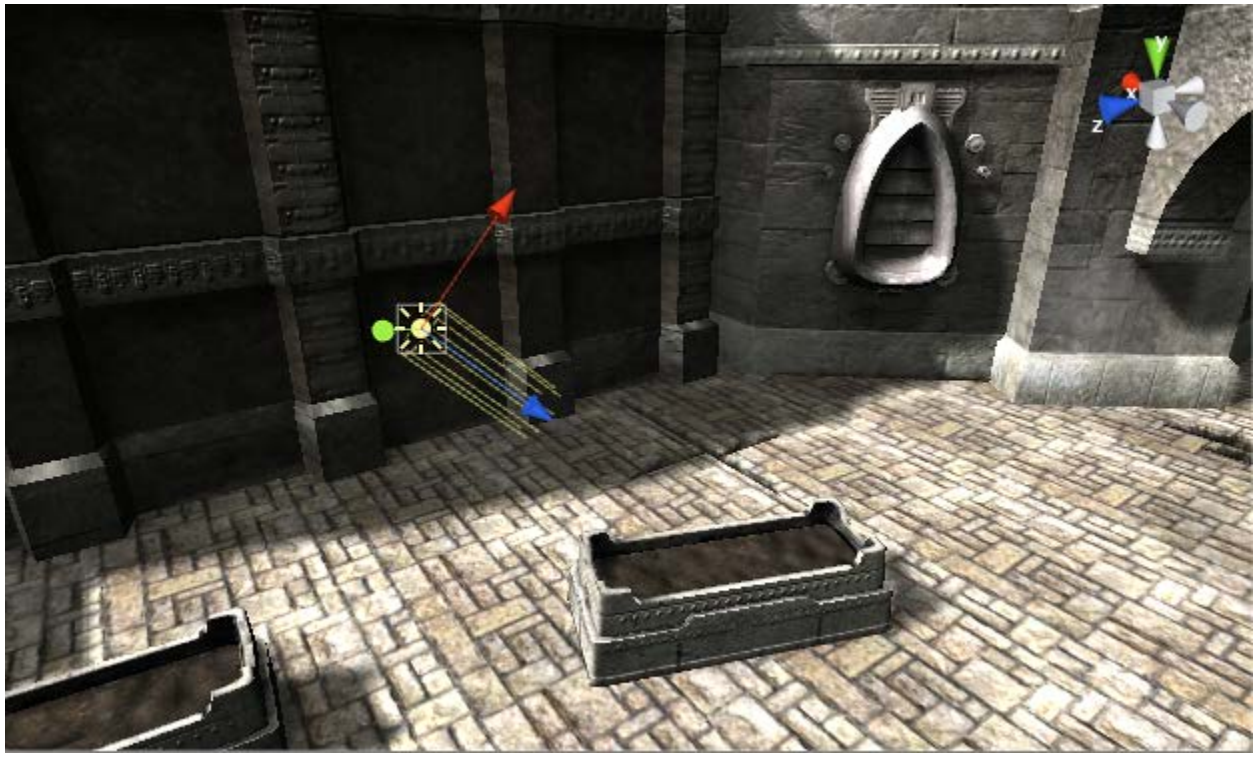
Low Poly + Normal Map

1542 Polygons

Lights

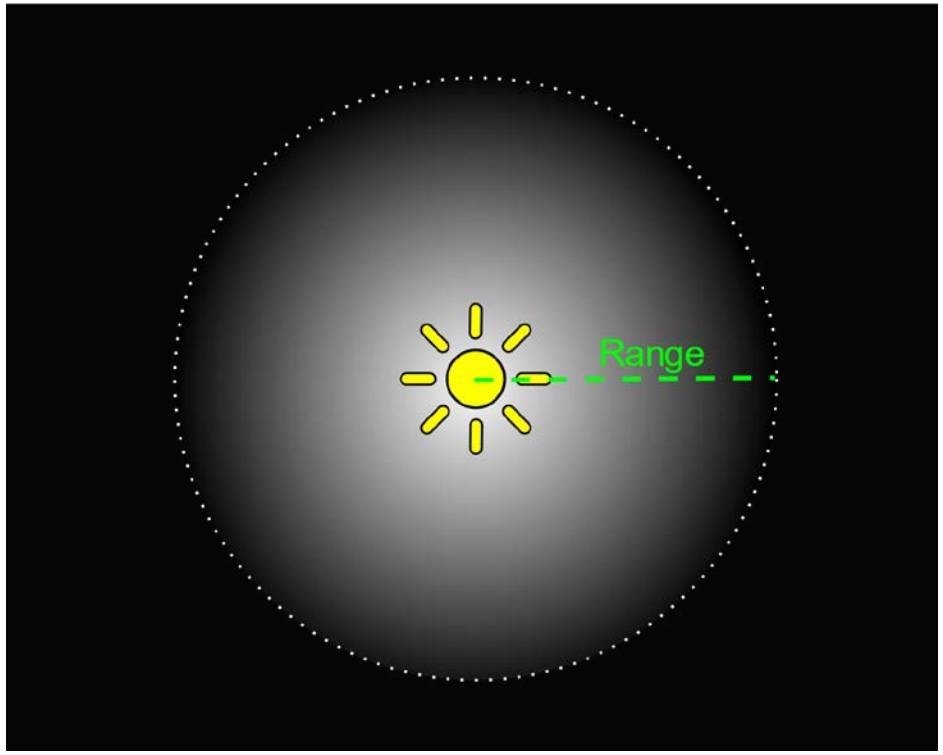
Directional Light

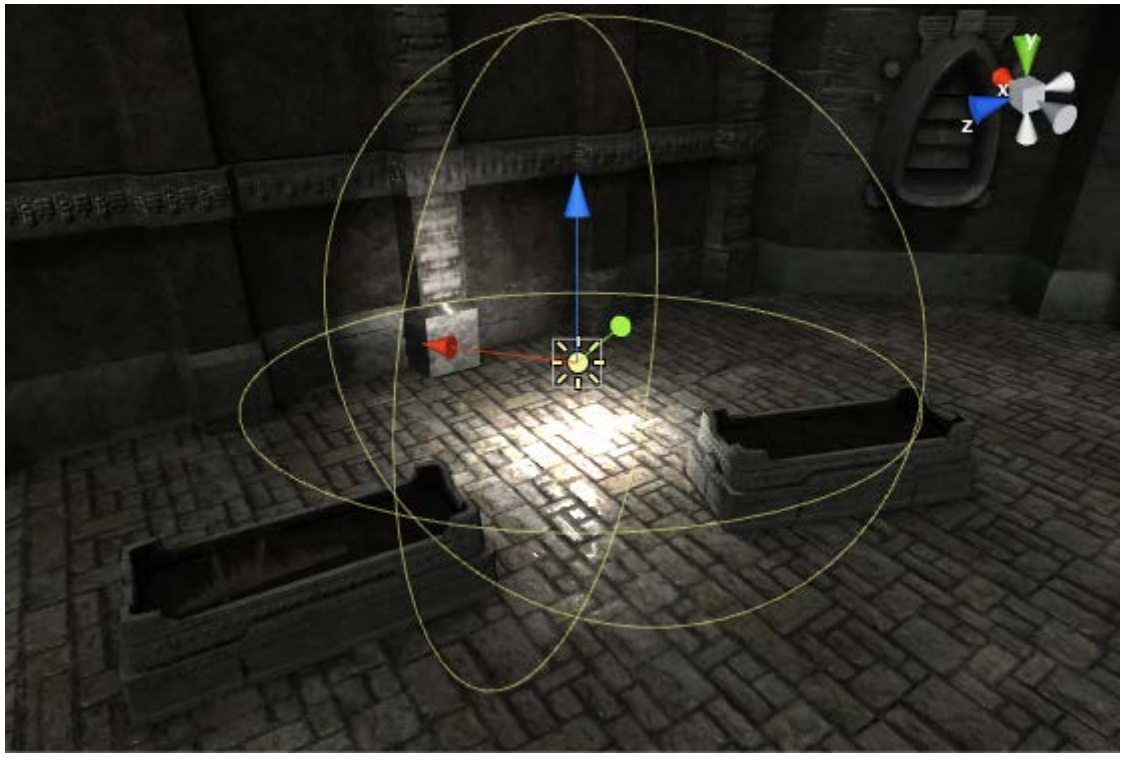




https://docs.unity3d.com/Manual/Lighting.html

Point Light





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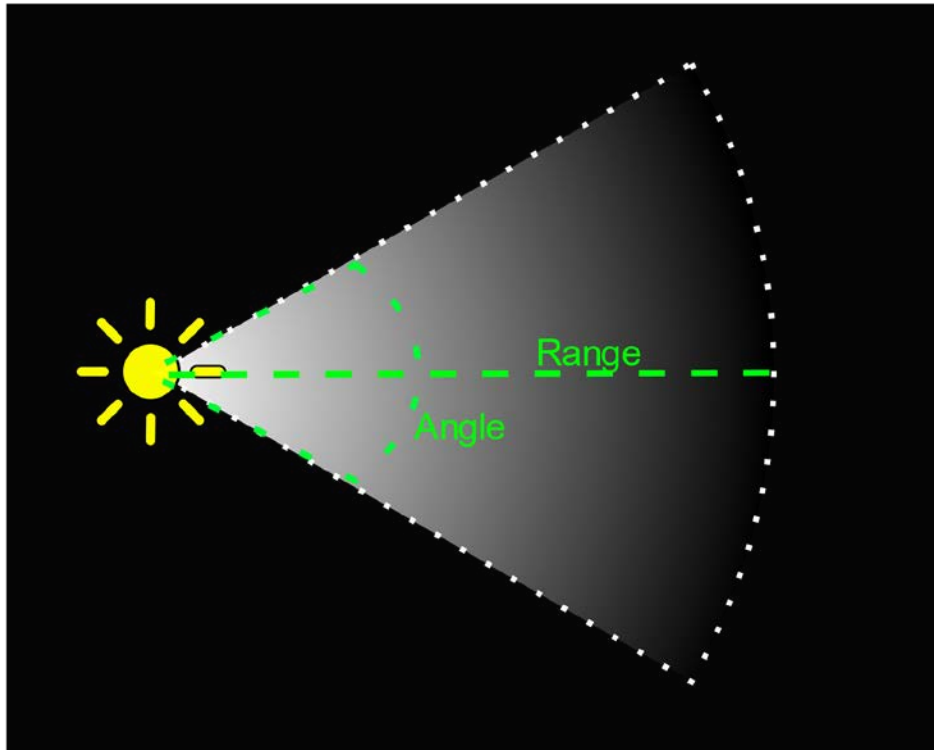
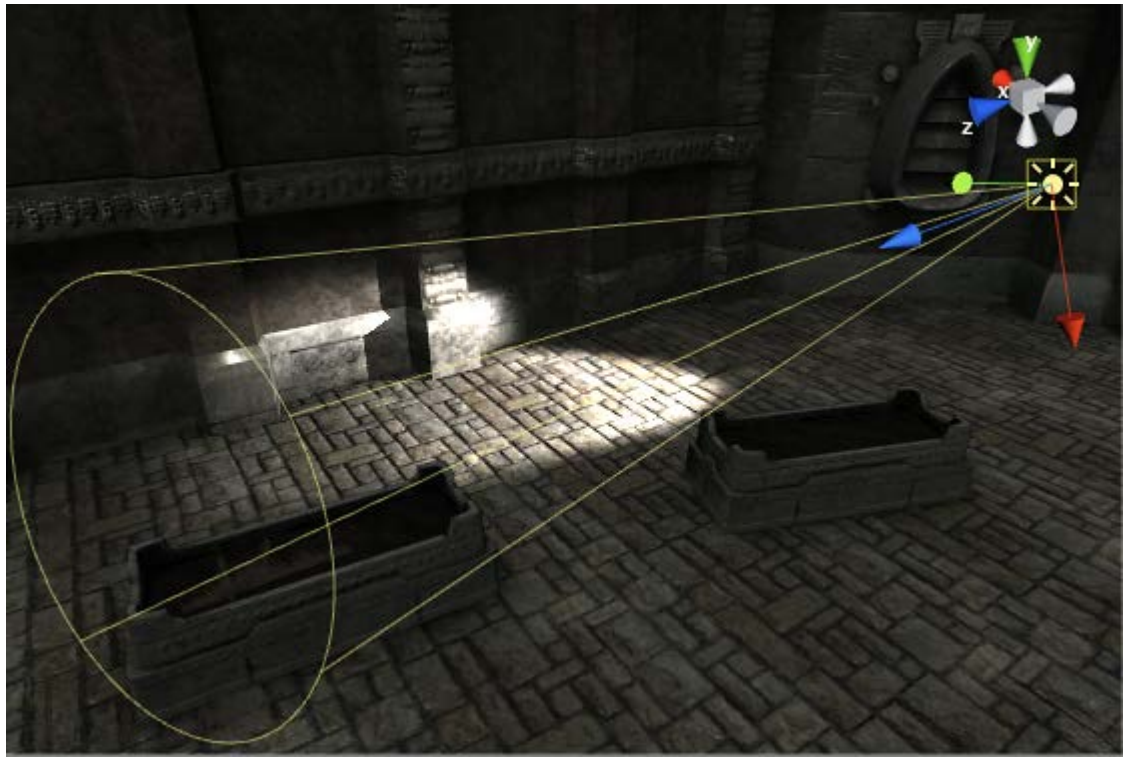
Spot Light





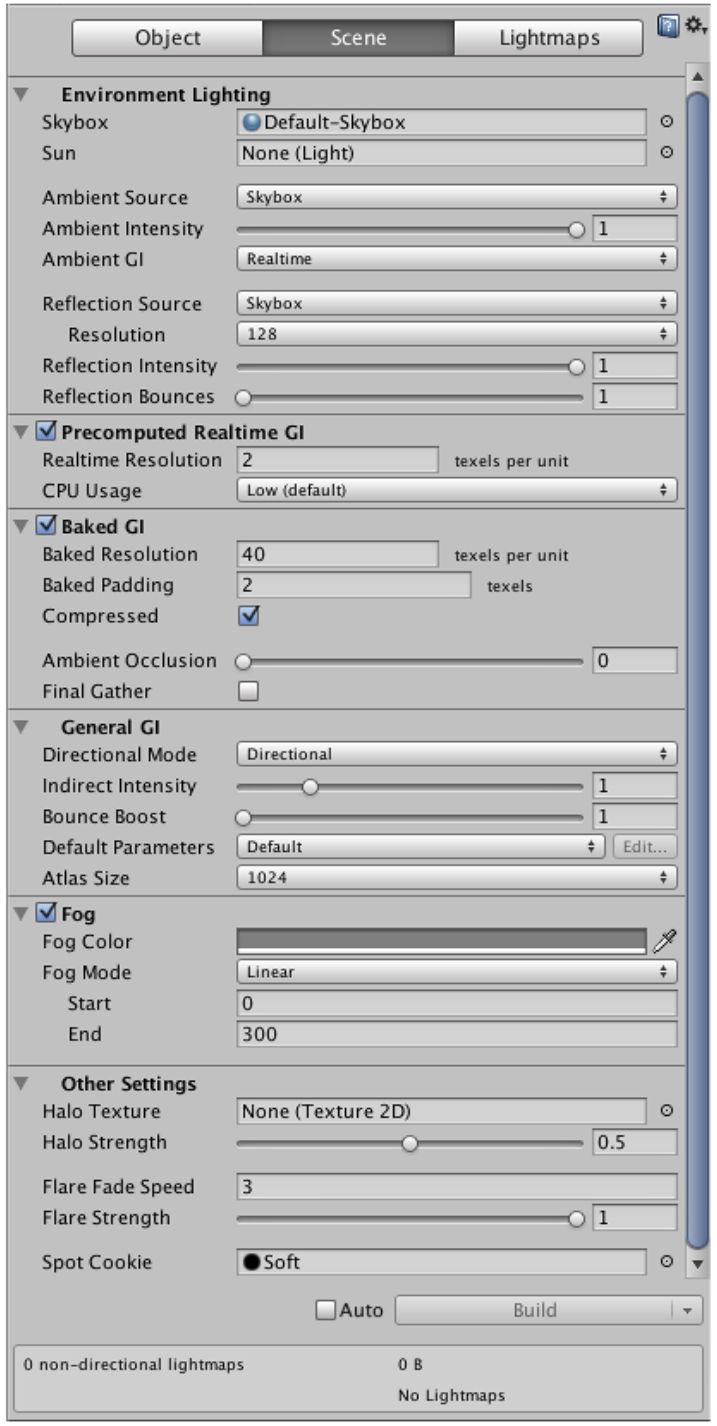
https://docs.unity3d.com/Manual/Lighting.html

Ambient light

Ambient light is light that is present all around the scene and doesn't come from any specific source object. It can be an important contributor to the overall look and brightness of a scene.

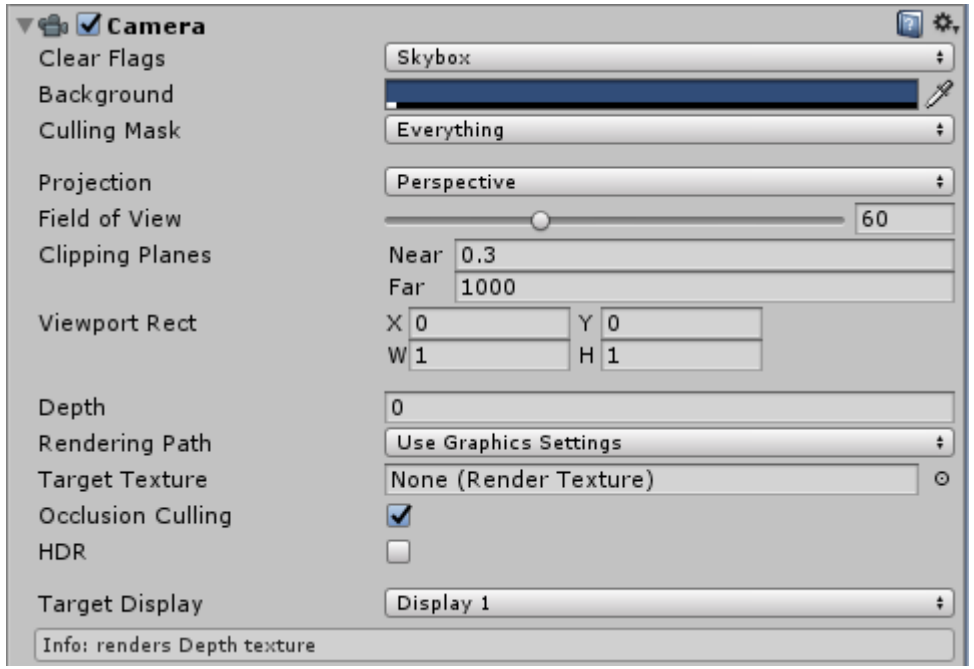
Ambient light can be useful in a number of cases, depending upon your chosen art style. An example would be bright, cartoon-style rendering where dark shadows may be undesirable or where lighting is perhaps hand-painted into textures. Ambient light can also be useful if you need to increase the overall brightness of a scene without adjusting individual lights.

Ambient light settings can be found in the Lighting window.



Ambient Lighting

- Window -> Lighting
- Scene Tab
- Things to adjust:
  - Skybox
  - Ambient Source
  - Ambient Intensity
  - Fog



Background

- When you aren't using a skybox:
  - Select your camera
  - Adjust the background color

Hotkeys and Controls

Unity References

- Scene View Navigation
- Positioning GameObjects