

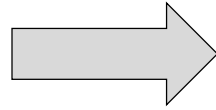


glTF in Unreal Engine

Mike.Erwin@EpicGames.com


glTF in Unreal Engine

- Static Meshes, Materials, Textures
- "Experimental" in UE 4.19 – Try it now!
- Help us prioritize features of the *next* release

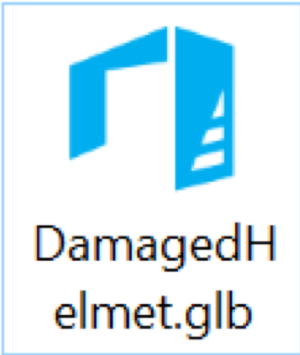


glTF Importer ⚠ BETA Version 1.0

An importer for Khronos glTF 3D models.



Enabled Epic Games, Inc.







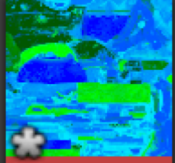

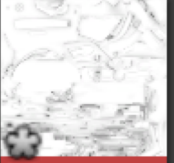

Content Browser

Add New Import Save All ← → Content

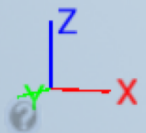
Content Browser

Add New Import Save All ← → Content

Filters Search Content

							
Starter Content	Material_MR	mesh_helmet_LP_3930damaged	T_Damaged Helmet_0	T_Damaged Helmet_1	T_Damaged Helmet_2	T_Damaged Helmet_3	T_Damaged Helmet_4

8 items (1 selected)



glTF takes guesswork out of import

- Orientation, Scale

Joachim Holmér  GDC
@JoachimHolmer

Here, have a coordinate system chart!

	Left-handed	Right-handed
Y is up	 DirectX	 OpenGL
Z is up	 UNREAL ENGINE	 source CRYENGINE 

7:31 AM - 18 Sep 2015

Tim Sweeney
@TimSweeneyEpic

Sorry y'all I was young and this coordinate system stuff was confusing

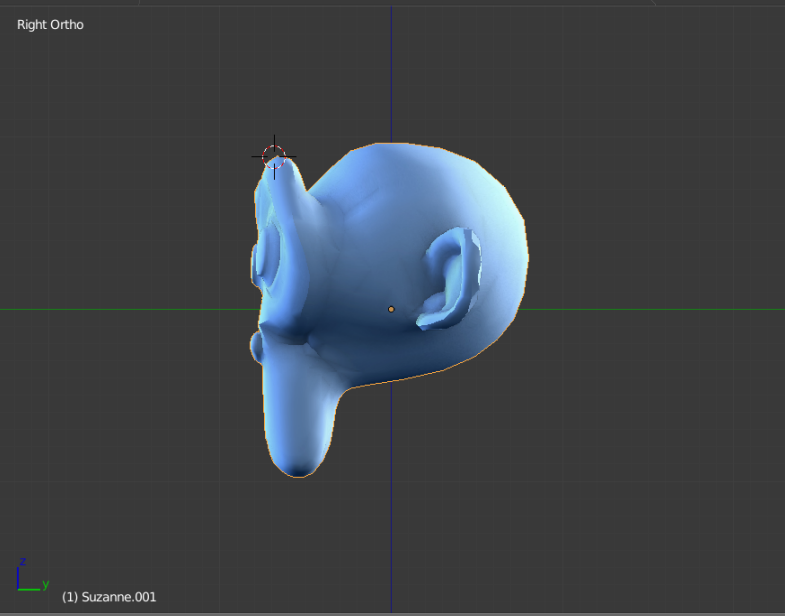
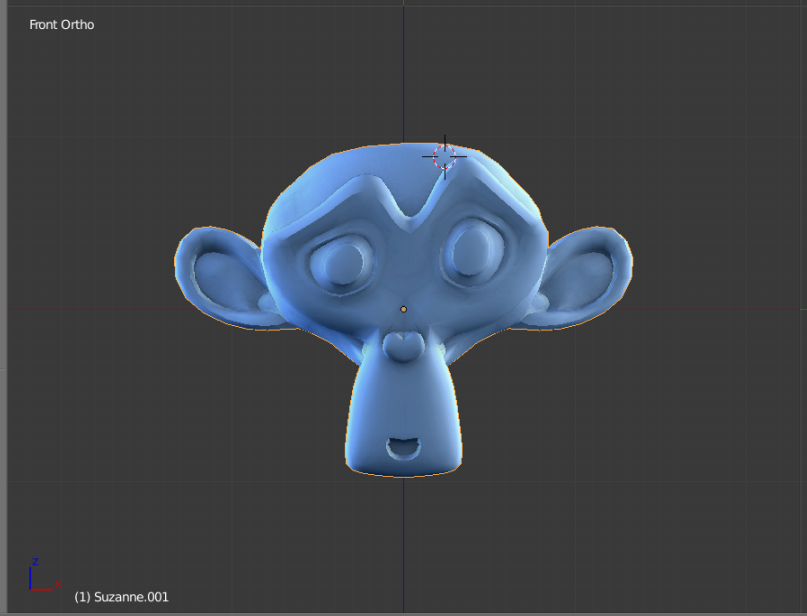
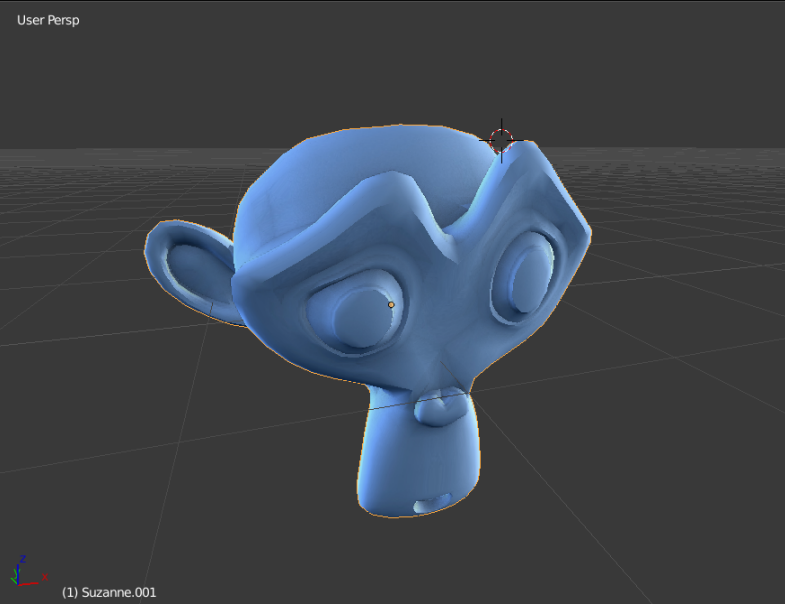
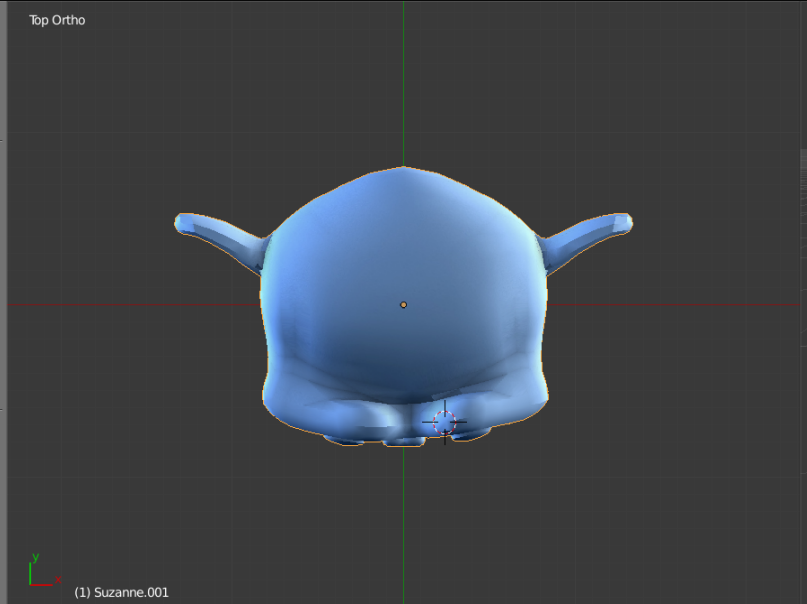
David Amador @DJ_Link
a real game dev struggle here
Show this thread



1:59 PM - 14 Jan 2018

Tools

- ▼ Transform
 - Translate
 - Rotate
 - Scale
 - Mirror
- ▼ Edit
 - Duplicate
 - Duplicate Linked
 - Delete
 - Join
 - Set Origin
 - Shading: Smooth Flat
 - Data Transfer: Data Data Lay
 - History
- ▼ Subdivision Set
 - Level: 1
 - Relative



XYZ Euler

Scale: X: 1.000 Y: 1.000 Z: 1.000

Dimensions: X: 2.674 Y: 1.624 Z: 1.939

Grease Pencil Layer

View

3D Cursor

Item

Display

- Only Render
- World Background
- Outline Selected
- All Object Origins
- Relationship Lines
- Grid Floor X Y Z
- Lines: 204
- Scale: 1.000
- Subdivisions: 10

Toggle Quad View

- Lock
- Box
- Clip

Shading

- Textured Solid
- Matcap
- Backface Culling
- Depth Of Field
- Ambient Occlusion
 - Strength: 1.496
 - Distance: 0.200
 - Attenuation: 1.000
 - Samples: 34
- Color
- Motion Tracking

View Search All Scenes

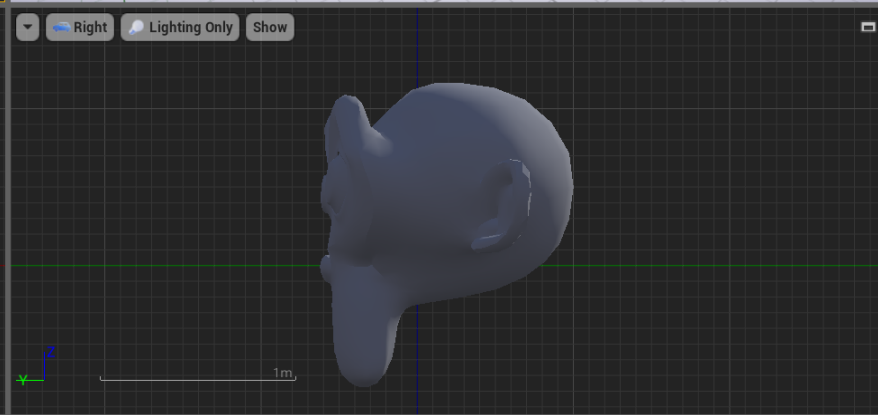
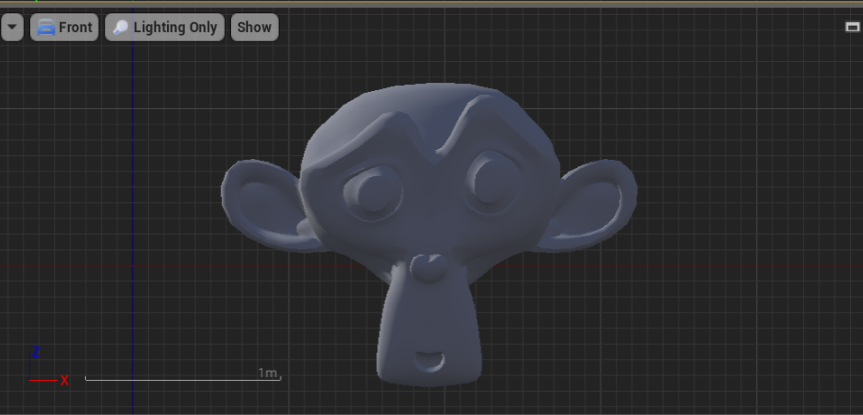
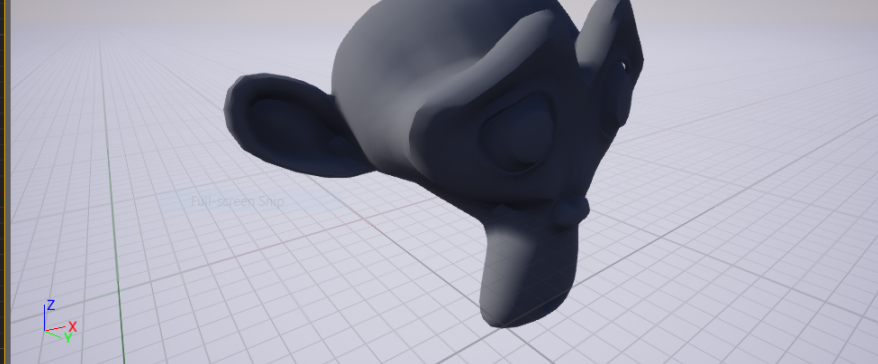
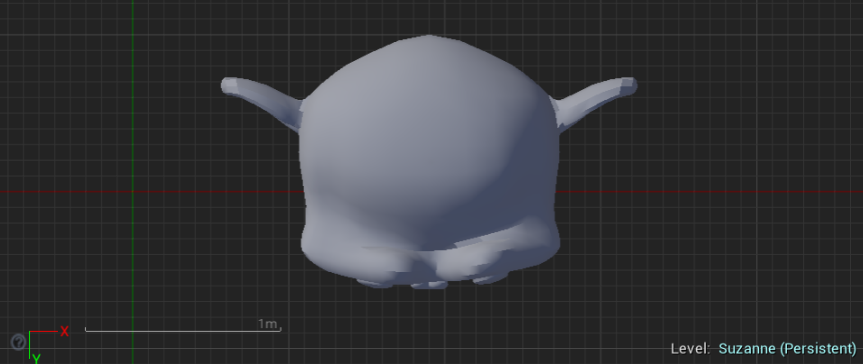
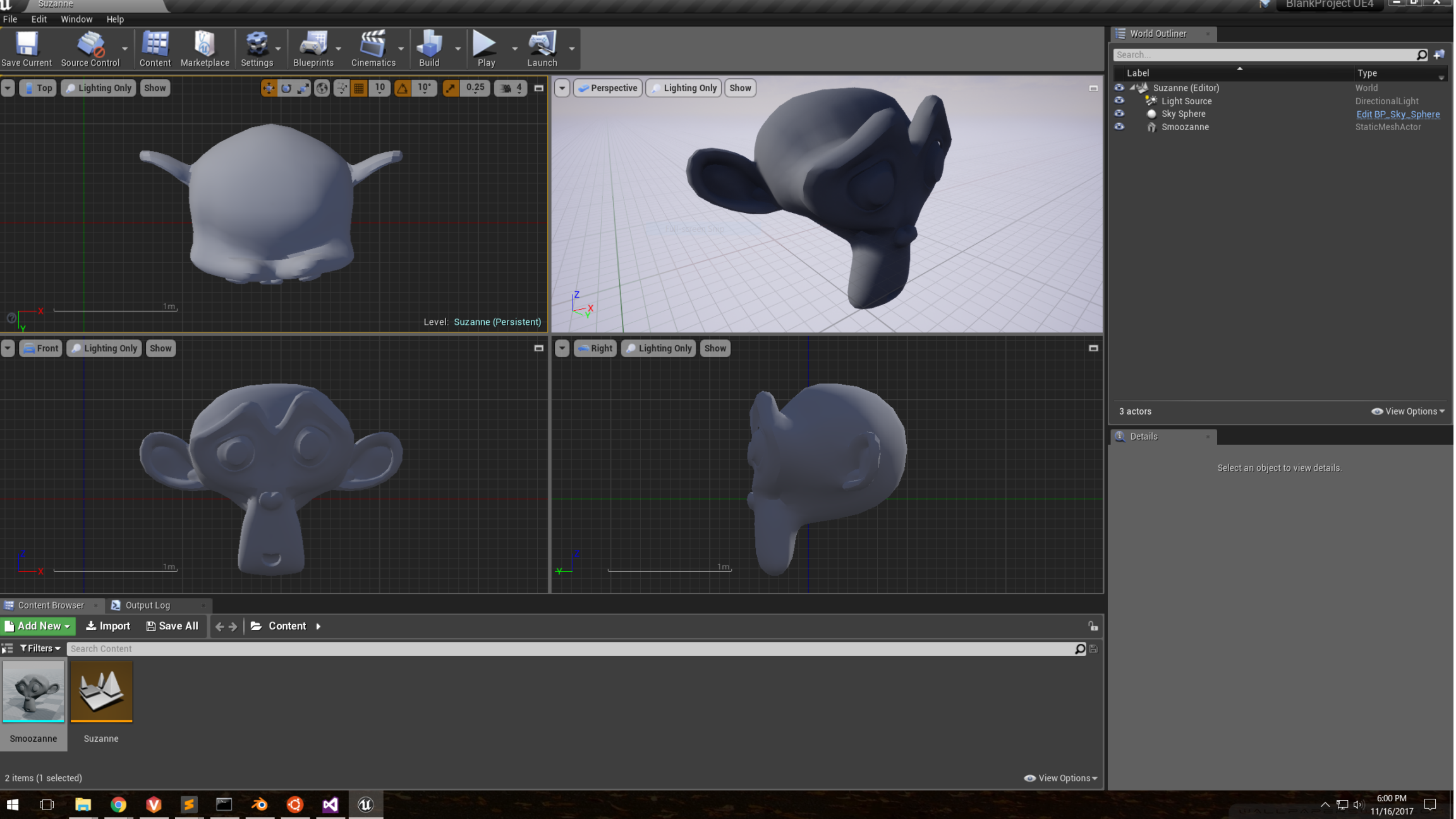
Scene

- RenderLayers
- World
- Camera
- Cube
- Lamp
- Suzanne
- Suzanne.001

Suzanne.001 5 F

Normals

- Auto Smooth
- Double Sided
- Angle: 36.4°
- Texture Space
- Vertex Groups
- Shape Keys
- UV Maps
 - UVMaP
 - LightMap
- Vertex Colors
- Geometry Data
- Custom Properties



Content Browser showing two items: Smoozanne and Suzanne. Suzanne is selected.

Label	Type
Suzanne (Editor)	World
Light Source	DirectionalLight
Sky Sphere	Edit BP_Sky_Sphere
Smoozanne	StaticMeshActor

3 actors View Options

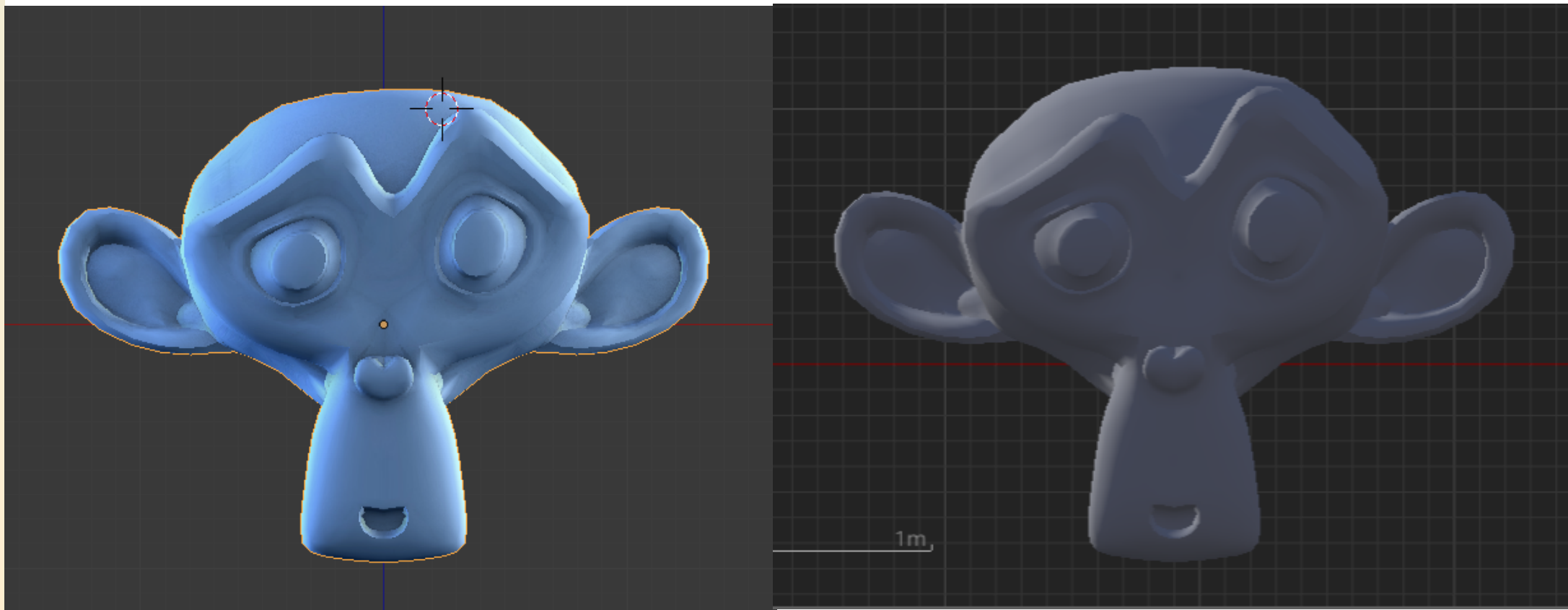
Details

Select an object to view details.

2 items (1 selected) View Options

glTF takes guesswork out of import

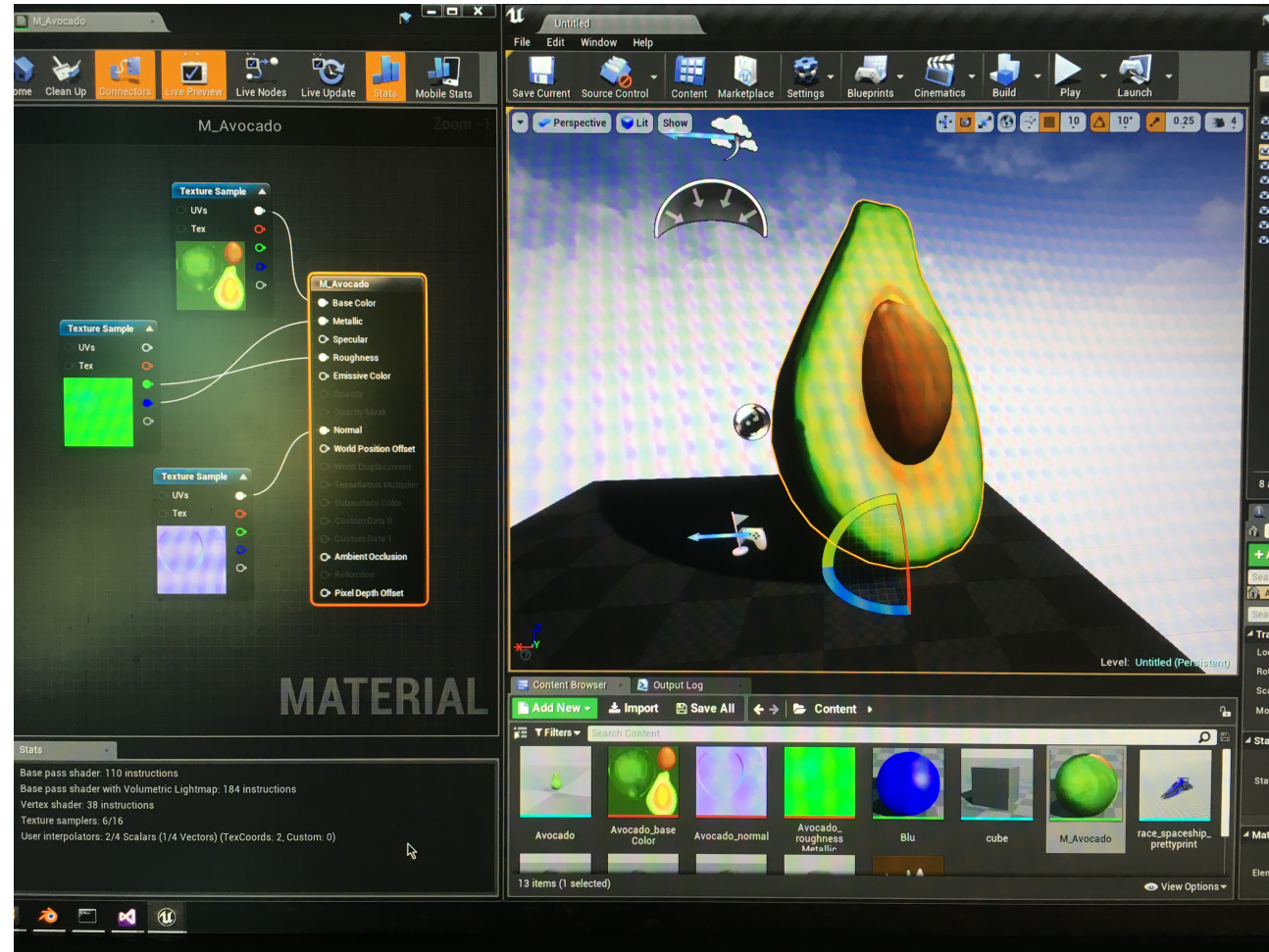
- Scale, Orientation
- Vertex Normals, Smooth Surfaces & Sharp Edges

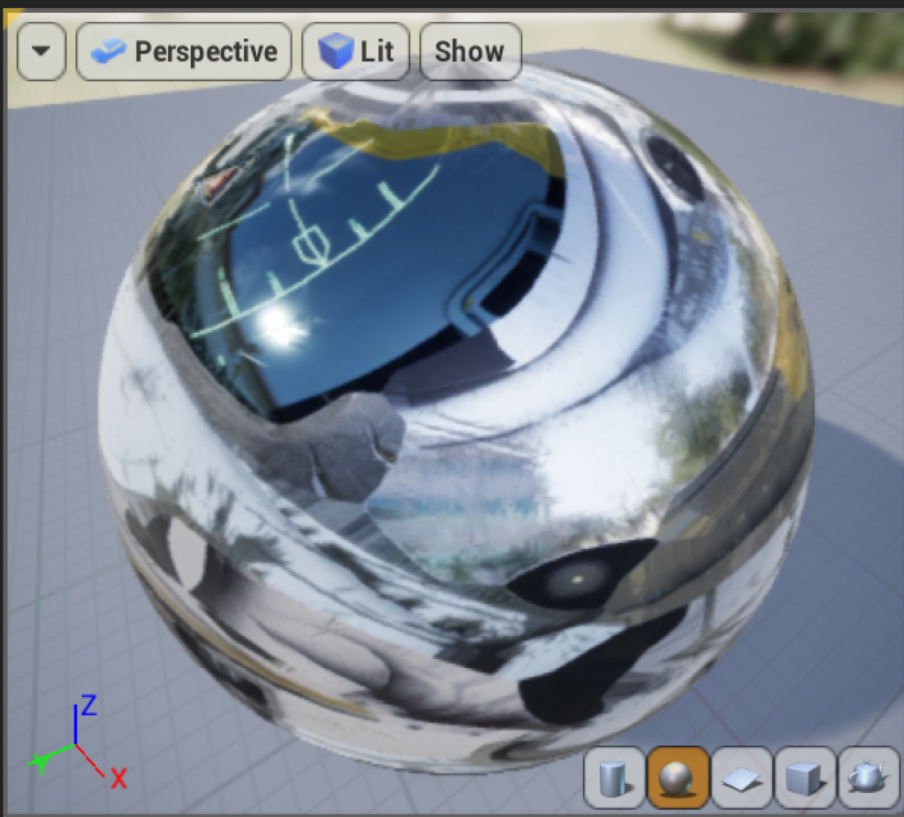


Materials

- Metal + Roughness PBR
 - Closest to Unreal Mats
- Normal Maps
- Transparency
- Emissive
- Occlusion

- Editable Node Graph
- Can have multiple per Mesh
- Can keep material slots & swap in full Unreal materials





Details Parameter Default

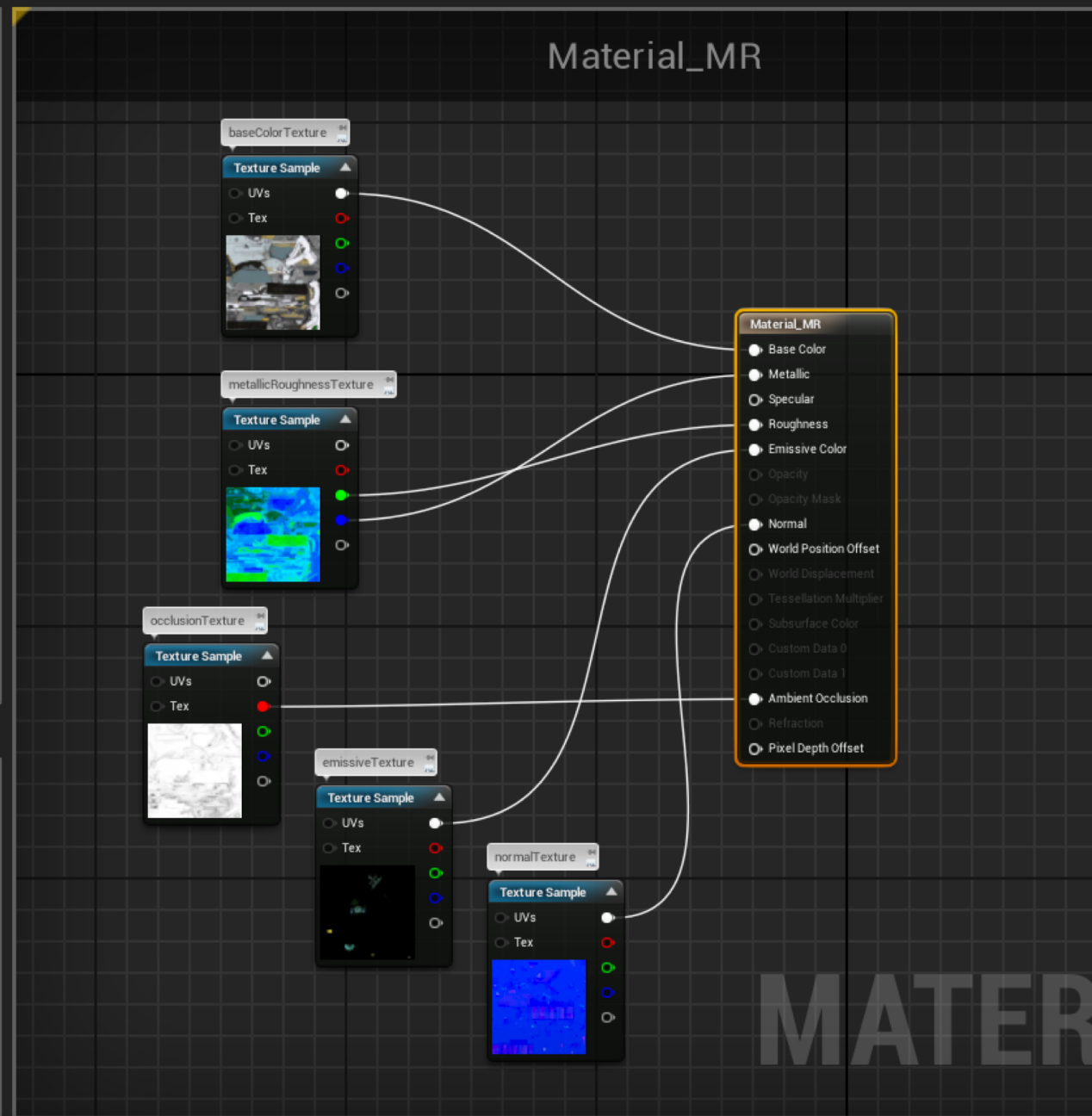
Search

Physical Material

Phys Material None

Material

Material Domain Surface



MATER

Why use glTF when making games?

Isn't glTF a *web thing*?

More like the PNG of 3D

- Predictable import / export saves artists time
 - Not sideways
 - Not 100x too small / too large
- Material model is rich enough for most uses
- Open format!
 - Public spec
 - Sample models
 - Validator
 - *Anyone* can implement

▼ Perspective Lit Show LOD Auto

LOD: 0
Current Screen Size: 1.127687
Triangles: 3,864
Vertices: 2,357
UV Channels: 1
Approx Size: 14x64x28
Num Collision Primitives: 0

Keep In Touch!



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[@DangerCobraM](https://twitter.com/DangerCobraM)

<https://forums.unrealengine.com/>

