

Art pipeline

Create a personal folder on your computer that you work within when it comes to Blender and substance painter files, then you sync that folder to your OneDrive. This is for ease of access for the team if something goes wrong.

Below are instructions on how to sync folders to your OneDrive.

<https://support.microsoft.com/en-us/office/sync-files-with-onedrive-in-windows-615391c4-2bd3-4aae-a42a-858262e42a49>

When you are done setting it up you can share the folder to everyone on the discord server.

Modelling workflow

Low-poly models

- Delete camera and light in the Blender scene.
- **Name the different meshes** / objects inside Blender for an easier UNITY workflow.
- **Apply Position/Rotation/Scale** (Ctrl+A submenu) on objects, otherwise their default (1,1,1) scale will be wrong.*
*if you're making a world scene in Blender, or something consisting of multiple separate objects, there's exceptions to the position/rotation part of this rule.
- Assign **Material with different names** that describe what those materials are supposed to be. ex. "gold" "metal" and so on. if it is just a base material with no special attribute we can name them "**base**".
- Use UVpacker for Optimal UV packing.
- **Make use of UV space**, only using half the pixels on a texture is wasting a lot of memory space.

Polygon amount 1.5k (guideline for characters)

- We try to keep inside these constraints but this is not the "law" as long as the models look appropriately low poly.
- High-poly model for detailed baking.

- Follow Art-bible!
- Export with following script:
https://cdn.discordapp.com/attachments/1029662882964701194/1039836805412945930/Unity_export.py

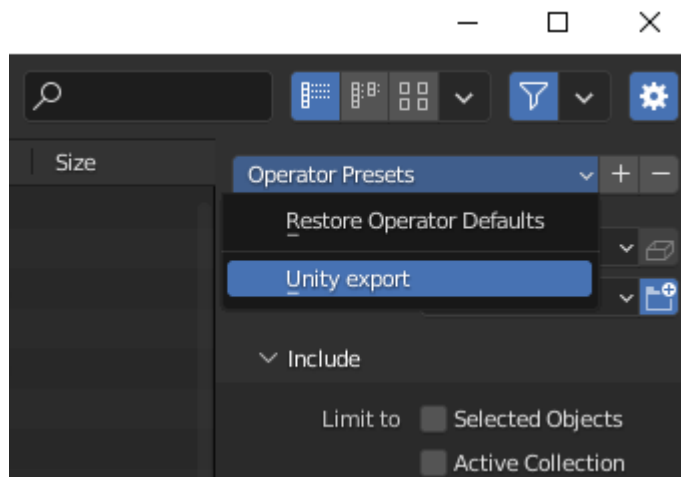
Instructions for adding into Blender:

- %appdata% in Windows search opens your Appdata/Roaming folder
- go to *Blender*

Foundation\Blender[version#]*\scripts\presets\operator\export_scene.fbx*

- create the folder if it doesn't exist.
- put Unity_export.py in the folder.

Now you have an export preset.



Texture Workflow

- Work with 2k textures in Substance Painter
- Follow the Art bible palettes as guidelines for color cohesion.
- Bake with High Poly for Ambient occlusion and Normals
- Export as 512x512 texture size for pixel goodness.

Animation and rigging

<https://actorcore.reallusion.com/auto-rig>

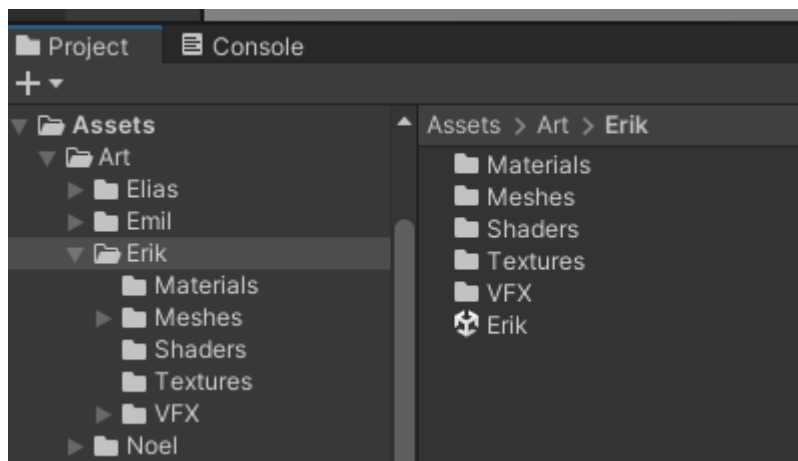
<https://www.mixamo.com/>

We try rigging and animating with one of these two services. (Evaluation of both sites required. Mixamo seems to be the best of both so far.) to get functional assets as quickly as possible.

After that you are welcome to rig and animate the characters to give them personalities of their own as long as we have time.

Implementation in Unity

When you are ready to implement into Unity it is vital that you create a good folder structure inside your project work folder.



You should be separating textures and meshes in a logical way

I have configured presets for import of textures and meshes.

Texture Type Default

Texture Shape 2D

sRGB (Color Texture) ☒

Alpha Source Input Texture Alpha

Alpha Is Transparency ☐

Ignore PNG file gamma ☐

► Advanced

Wrap Mode Repeat

Filter Mode Point (no filter)

Aniso Level 1

Default 🖥️ 📱 🖨️

Max Size 512

Resize Algorithm Bilinear

Format Automatic

Compression Normal Quality

Use Crunch Compression ☐

PC_Nightmare_Mushroom Import Settings 🔍 ⌵ ⌵ Open

Model **Rig** **Animation** **Materials**

Scene

Scale Factor 1

Convert Units ☒ 1m (File) to 1m (Unity)

Bake Axis Conversion ☐

Import BlendShapes ☒

Import Visibility ☒

Import Cameras ☐

Import Lights ☐

Preserve Hierarchy ☐

Sort Hierarchy By Name ☒

Meshes

Mesh Compression Off

Read/Write ☐

Optimize Mesh Everything

Generate Colliders ☒

Geometry

Keep Quads ☐

Weld Vertices ☒

Index Format Auto

Legacy Blend Shape Normals ☐

Normals Import

Blend Shape Normals Calculate

Normals Mode Area And Angle Weighted

Smoothness Source Prefer Smoothing Groups

Smoothing Angle 60

Tangents Calculate Mikktspace

Swap UVs ☐

Generate Lightmap UVs ☐

Revert Apply

▼ **Asset PostProcessors**

- UnityEditor.Rendering.Universal.FBXMaterialDescriptionPreprocessor
- UnityEditor.Rendering.Universal.SketchupMaterialDescriptionPreprocessor
- UnityEditor.Rendering.Universal.ThreeDSMaterialDescriptionPreprocessor
- UnityEditor.Rendering.Universal.AutodeskInteractiveMaterialImport
- UnityEditor.Rendering.Universal.FBXArnoldSurfaceMaterialDescriptionPreprocessor
- UnityEditor.Rendering.Universal.PhysicalMaterial3DsMaxPreprocessor
- UnityEditor.Rendering.Universal.ModelPostprocessor
- VFXExternalShaderProcessor