Last update:

28. JUNI 2023

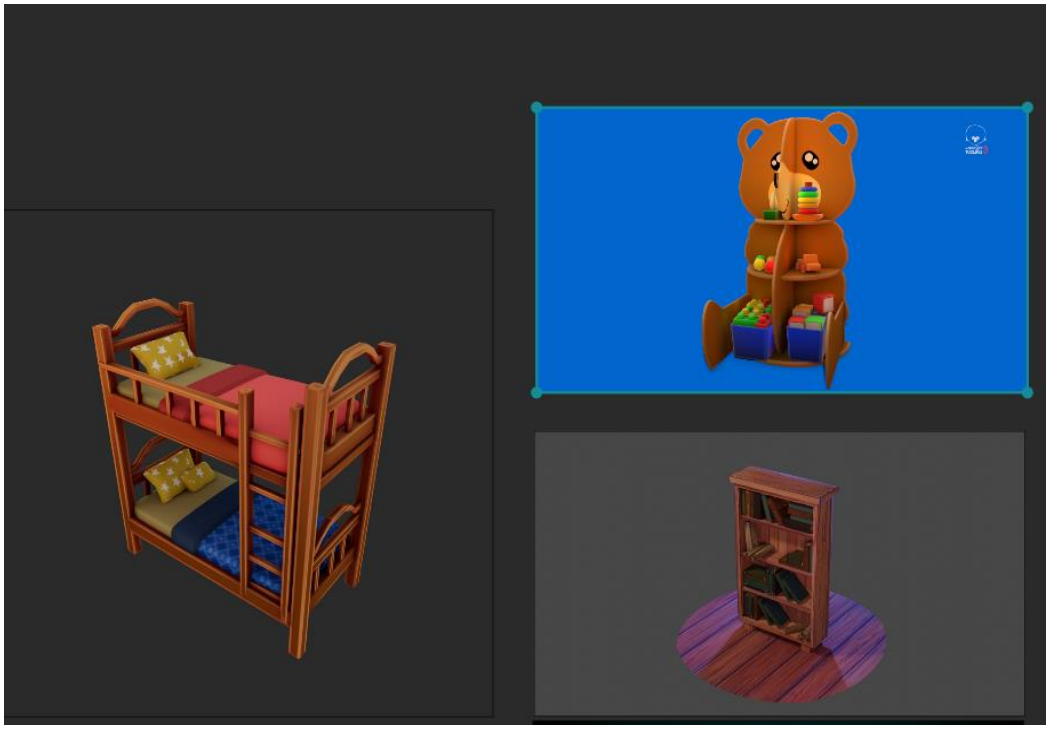
DEADCARE

ARTBIBLE

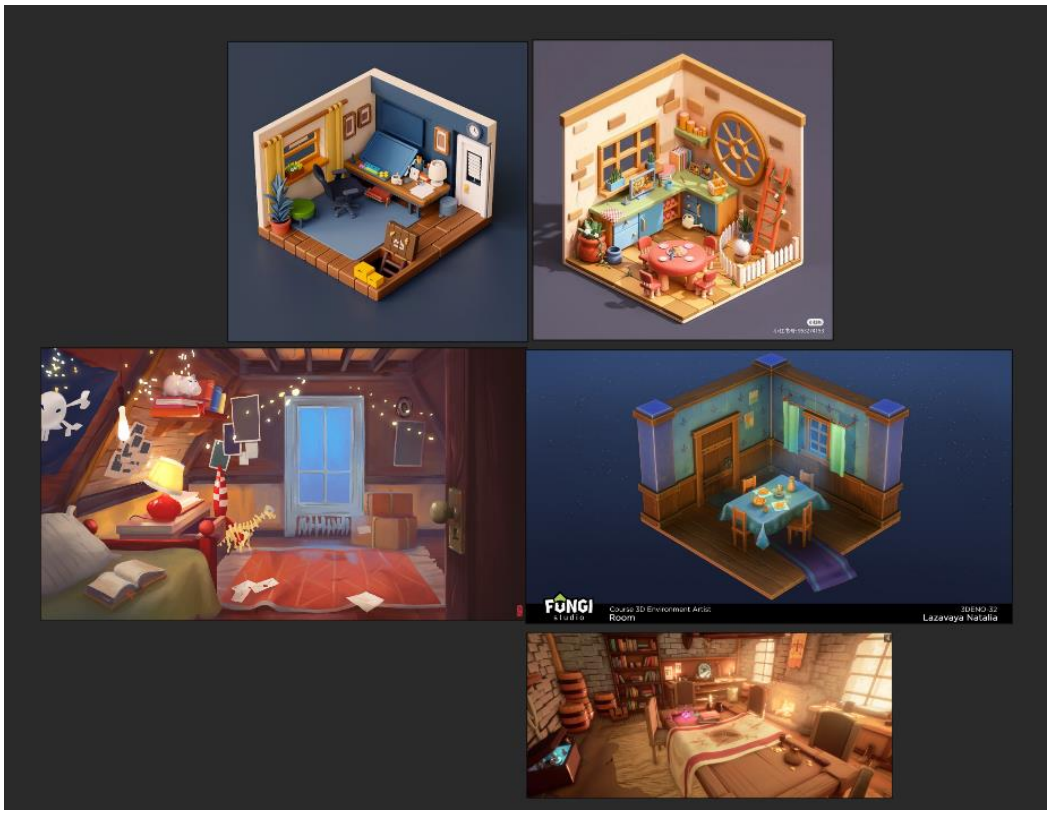
Inhalt

Moodboard – 3rd Party Concept art

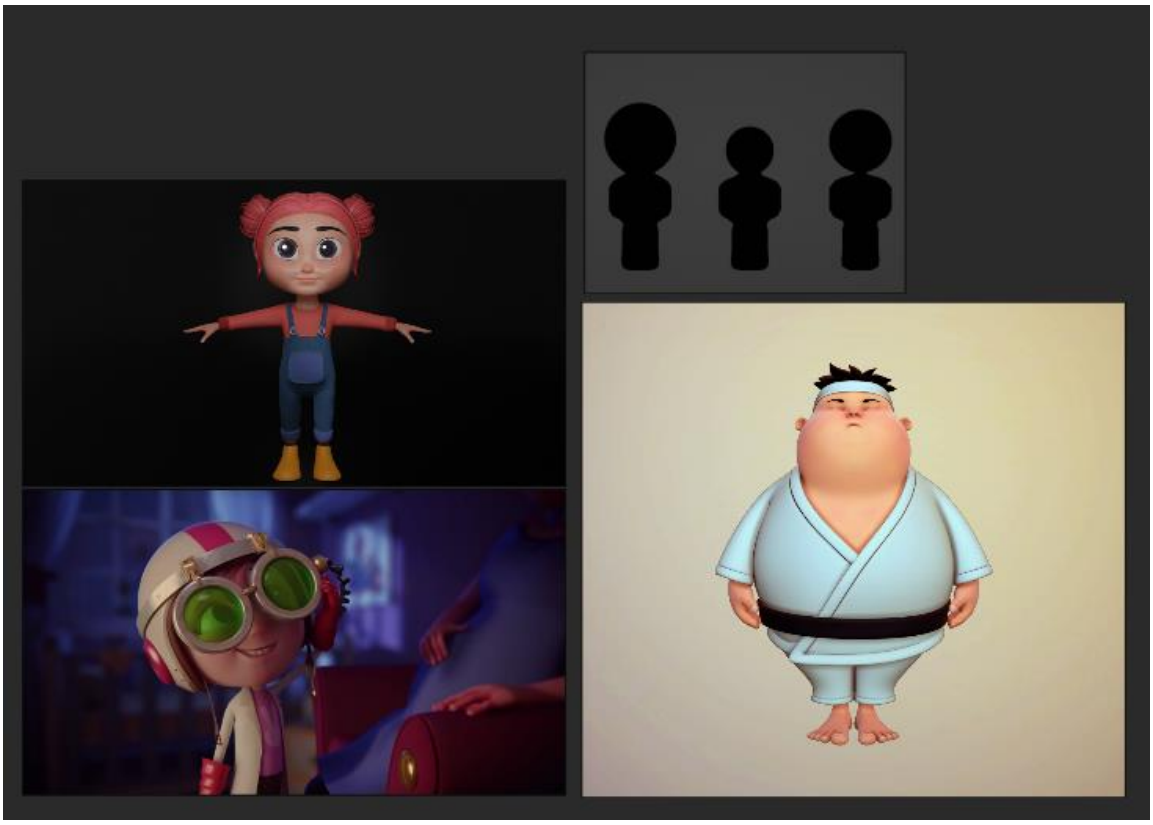
(Grade of stylization)



(Mood)



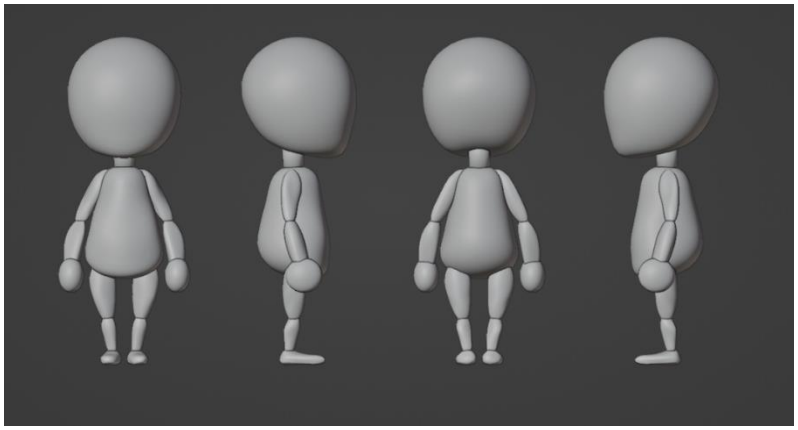
(Character shapes)



Character Art Guidelines

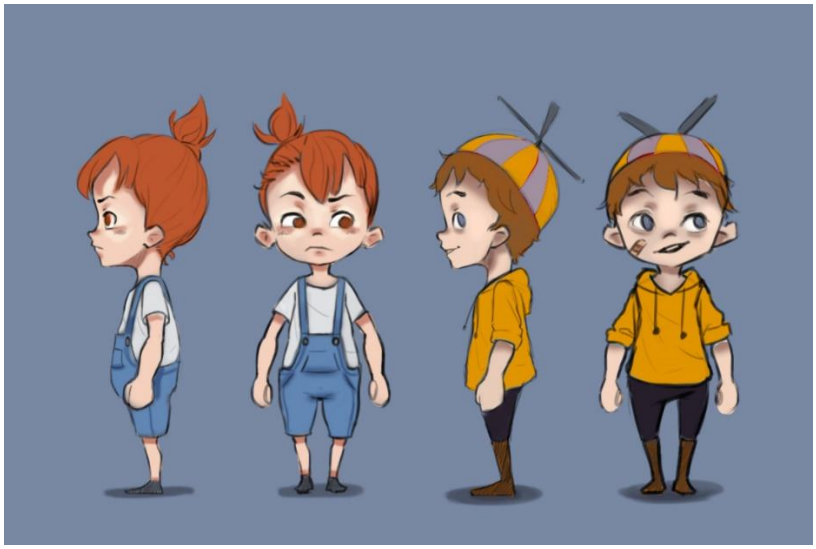
Shape

This Example shows the general proportions for characters. Each design needs to work with up to 12 duplicates in the same shot. Except the head, the children will not have extra animated details (backpack, scarf [..]) in the design. Every design must work with the existing rig.



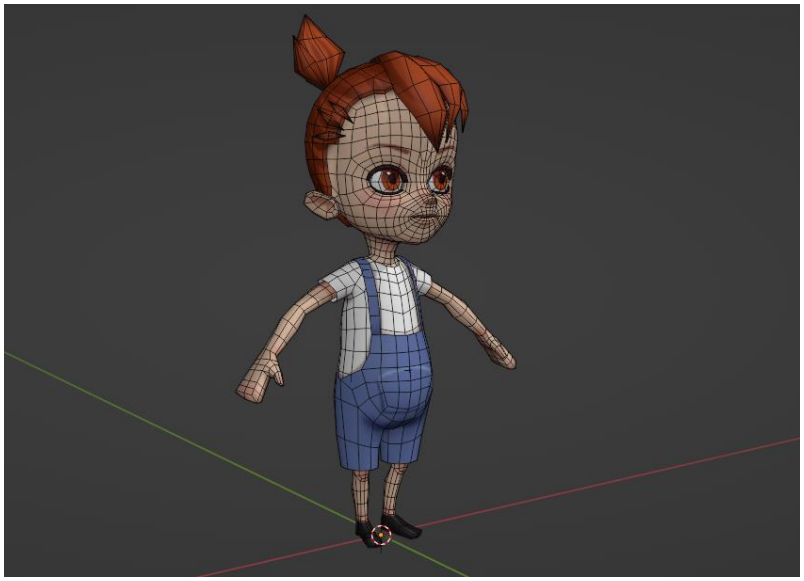
These attributes are the result of several iterations to match the orthographic perspective and appeal.

- Big head
- Bigger hands
- Small feet



Technical details:

-2,500 verts
-Textures: 256-512 pixel



Environment Art Guidelines

General Shapes

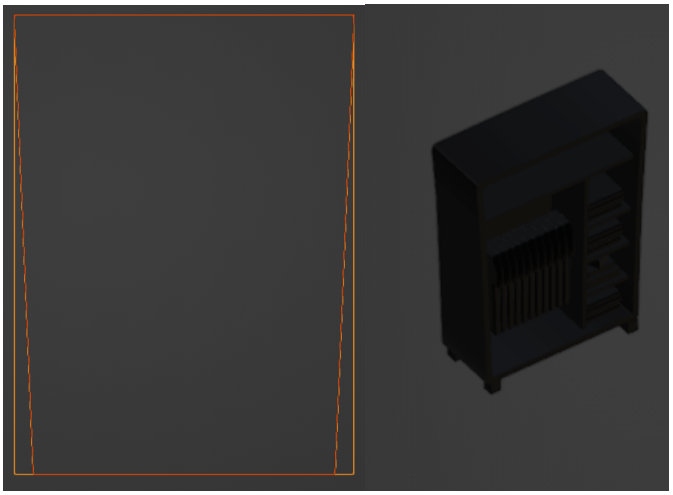
In general, rounded. If something is supposed to look sus, try to involve triangles on top of the bevel / invert the roundness.
Spikiness should be avoided – only for the exaggerative effect.

Furniture:

shapes are diluted slightly at the bottom to support the plasticity of the 3d Space.

The angle should vary between 2.5° and 0.1° degree depending on the needed edge, but pure 90° should be mostly avoided.

Edges need to be beveled up to 3.



Props

Decorations / Props:

Props need to be readable from the silhouette since the player might not see them bigger as a thumbnail on screen. Extremes, like spiky areas are only needed to support the meaning /or interaction.

Most of the props are too small to use their own textures. A few exceptions – like special surfaces (stuffed animals) will use the general workflow.

Texturing – General

To reduce the number of drawcalls and memory space, a trim sheet for bigger repeating assets and materials is used. Smaller assets, like toys or consumables will be textured via a gradient map.

Some Assets will need additional AO for stylized effects or artificial darkness. In this case, the advantage of vertex color will be used. They will be mixed in the materialsettings with the texture, only big and important assets will make use of this (1. Trim; 2. Lightmap)

Repeating textures & custom lightmaps

Performant (mirrored [..]) UV Layouts cannot be used in general for the Lightmap, since overlapping Uvs cause visible artefacts. For every asset, a generated lightmap will be used, since the only big disadvantage is a bigger lightmap (-> memory space and baking time) – against less time for planning and production.

Texture packing:

Assets are sorted after themes into groups and exported as one (fbx) file. For example, the clothings share one material and are exported as 2 versions of the set: unfolded and folded.
New Asset groups – or sets will be exported as another fbx with its own UV Layout since reimporting can cause reference bug in the mesh components of existing prefabs due to changing mesh names.

Texture size:

The texture size varies from 64 to 256 pixel textures.

Texturing – Gradient Mapping

The Gradient mapping technique uses a predefined texture with all relevant colors in it. Since Deadcare is using a colorful environment with changing level themes, the texture will try to access as many colors as possible instead of preventing every gradient potential between the values as shown in various online examples.

Shading

Since those UV Layouts are not useable for baking normal maps, smoothing groups are required to achieve a solid shading.

Vertex Color

In some cases, assets will share a pattern during color changes or need additional AO which is not strong enough on the lightmap.

Then, the exported file can include vertex color, but black / white values only which will get mixed with a specific vertex material from Unitys Shadergraph.

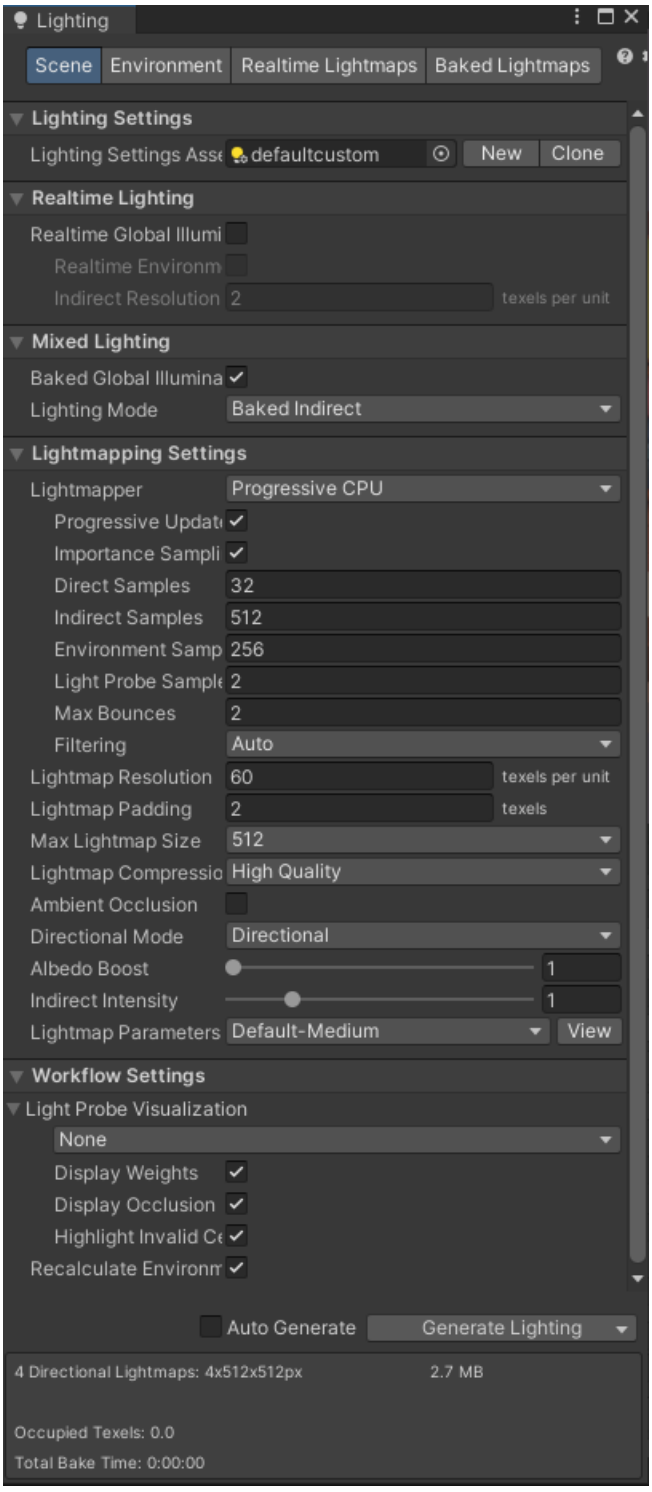
Unity – Material Setup

PBR

metallicness and smoothness should be set to a default value of 0. Some materials will need these channels, but most of the shading relies on lightbake and colors/ AO.

Light

Lighting – Settings



This is the last iteration of the lighttests, any changes should be screenshotted and replace the image above with the last working version.

Lightbakesupport // Decals

To exaggerate some dark areas, dark areas with a simple gradient decal will be placed on the specific areas.

(godrays and particles will most likely need additional light cookies and decals(added in future))

Additionally, some flat surfaces which use tiled UV´s need normal details for which a decal sheet will be used. For now, only the bed uses this.

Workflow

Concepting:
Pureref

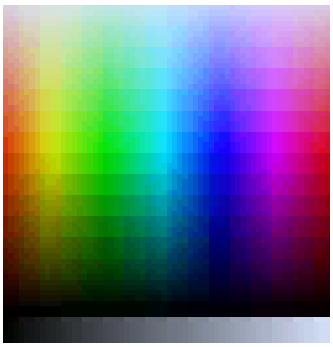
3D

(except Maya for animation)

Texturing:

Substance Painter /Krita /Photoshop

Gradient texturing:

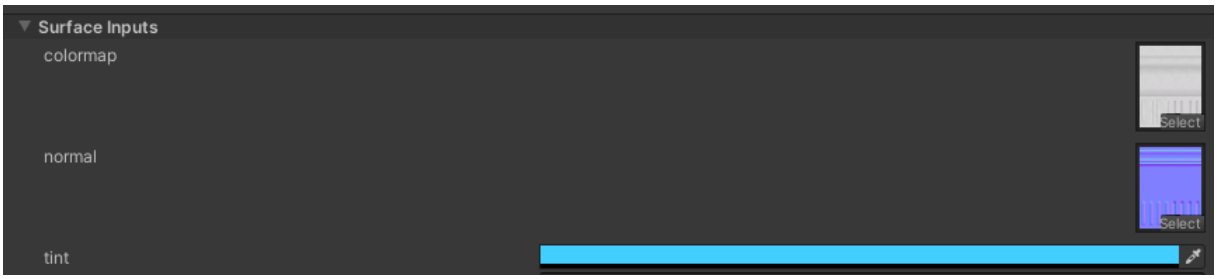


Uvs can go wild here, use smoothing groups for the right shading.

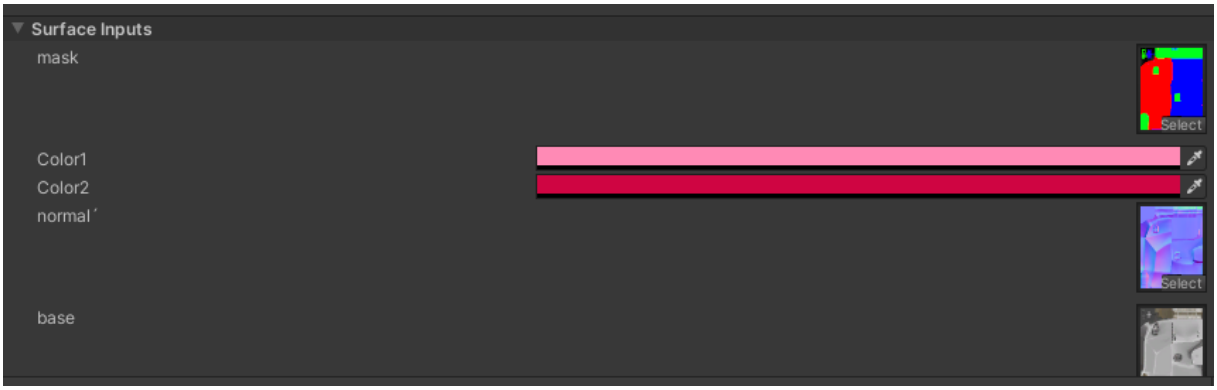
Basetextures

Most of the exported textures need to be saturated or in other ways combinable with blending inside of Unity.

Colorblend texturing



+ masks for more complex models(R,G,B)



Normal maps are in the most cases only needed for more complex surfaces or trim sheets

Sketches (decals)

Each sheet needs to be tileable into quads. The margin size is less important, the frames only have to work as single images or in combination with others / their neighbors.