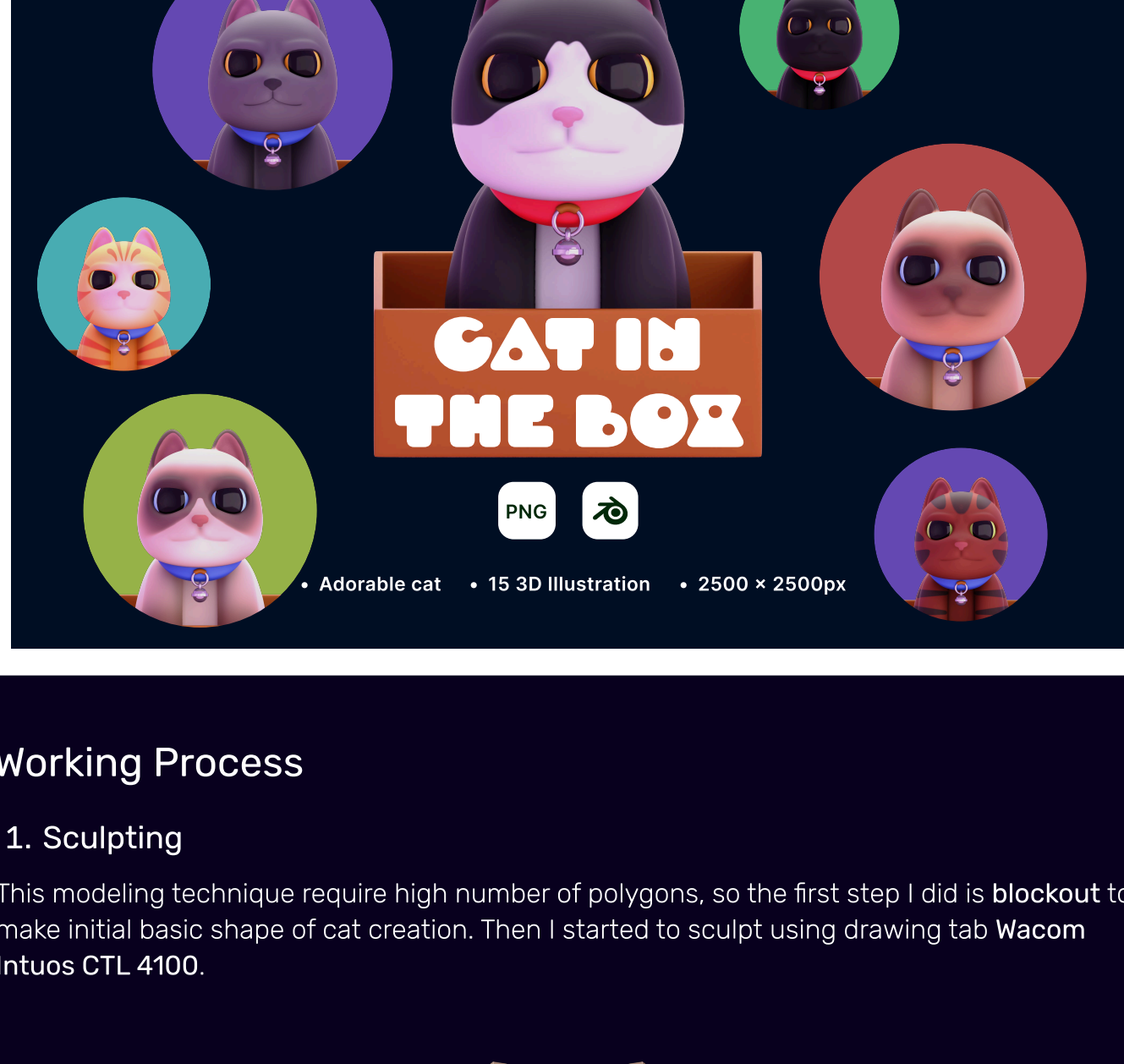


Adorable Cat 3D Illustration

Project Highlight : Sculpting (Highpoly), Retopology (Lowpoly), UV, Texturing



Working Process

1. Sculpting

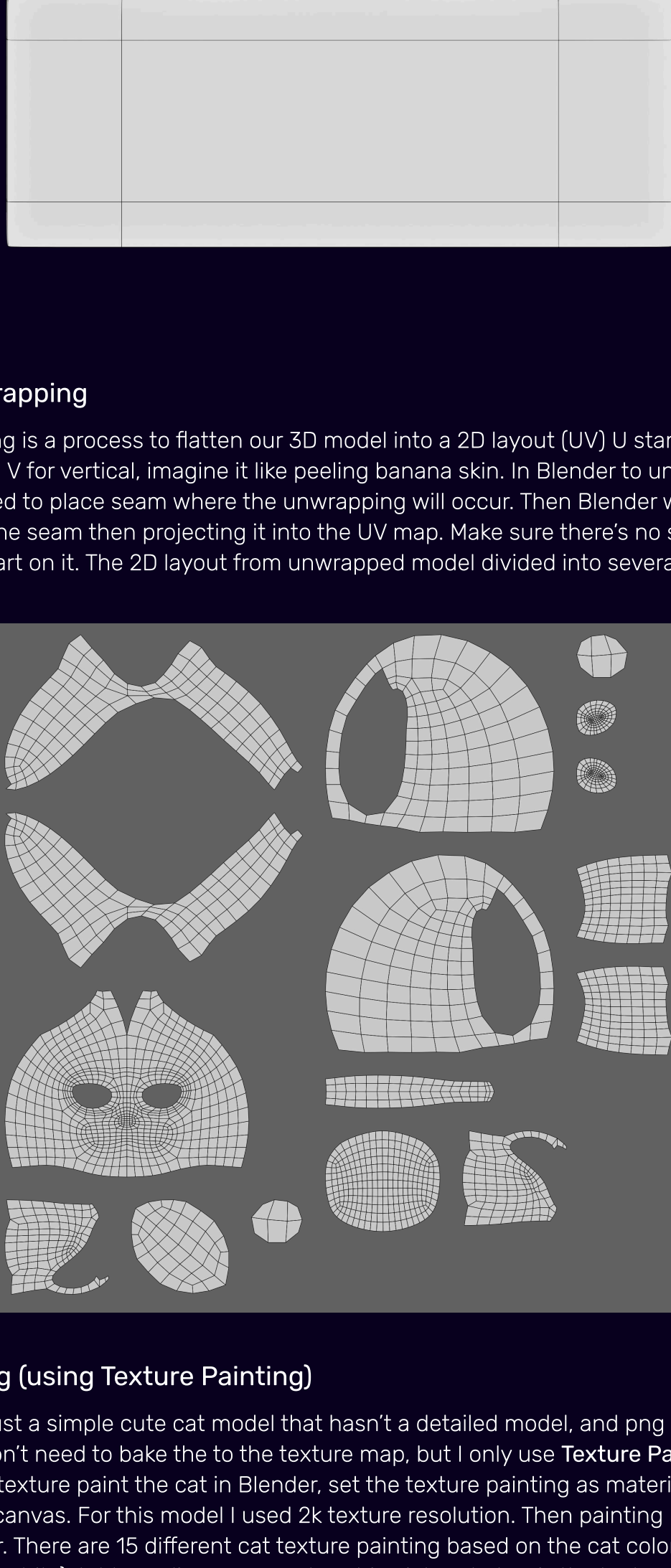
This modeling technique require high number of polygons, so the first step I did is **blockout** to make initial basic shape of cat creation. Then I started to sculpt using drawing tab **Wacom Intuos CTL 4100**.



There are many useful sculpting tools in Blender, but for this project the tool I used is **Draw**, **Draw Sharp**, **Crease**, **Inflate**, **Grab**, **Smooth**, and **Mask**. The sculpting process can only be done by increasing the number of polygons on the object that wants to be sculpted. That's why the models made with sculpting techniques are called **high-poly** models.

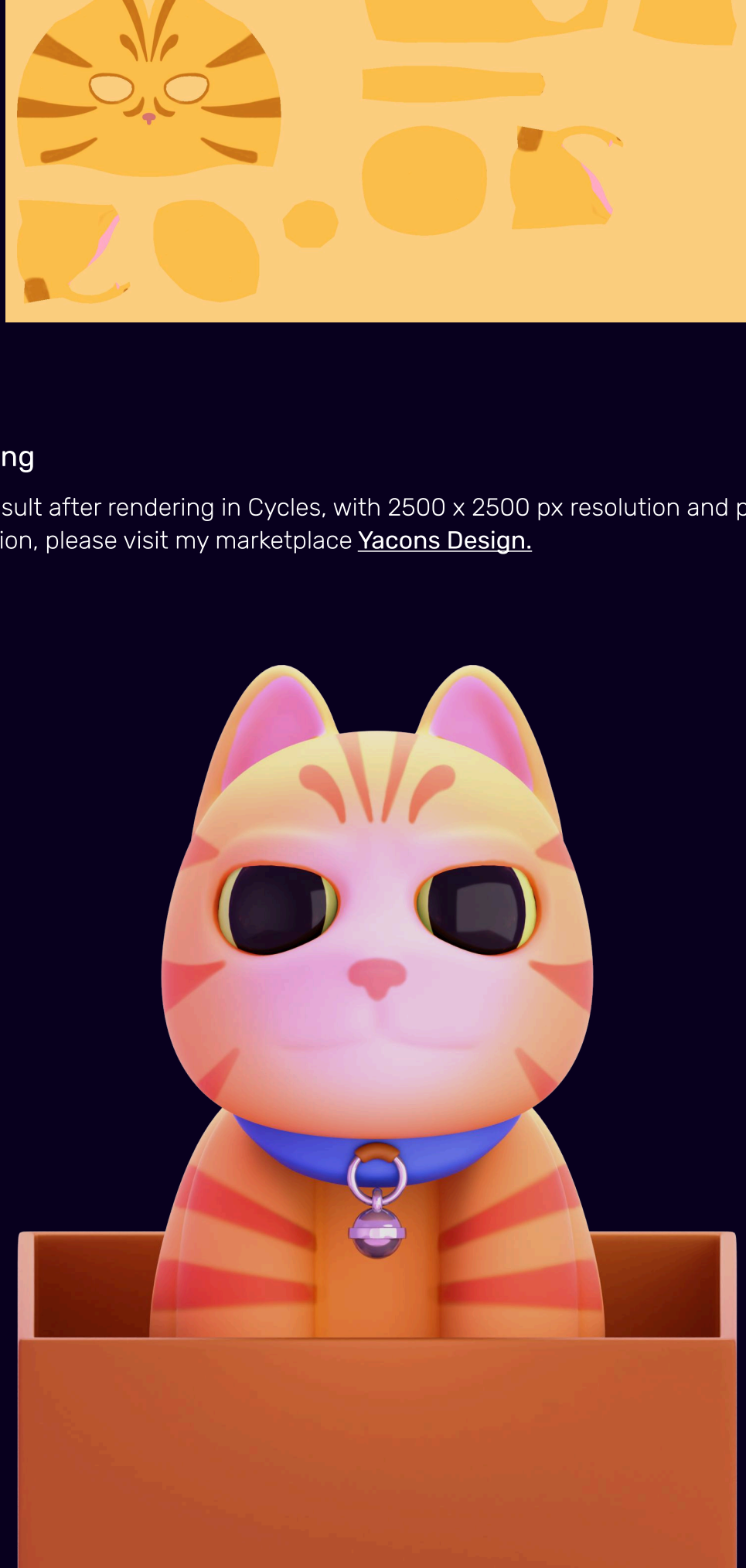
2. Retopology

Retopology commonly used after sculpting high-poly models, by rebuilding a 3D's geometry to create a clean, optimized, and animation-friendly mesh. I did the retopology manually, using the **Shrinkwrap** modifier in Blender applied to the plane object with reference to the object sculpt.



3. UV Unwrapping

UV Unwrapping is a process to flatten our 3D model into a 2D layout (UV) U stands for horizontal and V for vertical, imagine it like peeling banana skin. In Blender to unwrap the 3D model, we need to place seam where the unwrapping will occur. Then Blender will cut the model along the seam then projecting it into the UV map. Make sure there's no stretching or overlapping part on it. The 2D layout from unwrapped model divided into several parts (UV island).



4. Texturing (using Texture Painting)

Because it's just a simple cute cat model that hasn't a detailed model, and png only for the output, so I don't need to bake the to the texture map, but I only use **Texture Painting** for the cat model. To texture paint the cat in Blender, set the texture painting as material, by creating texture paint canvas. For this model I used 2k texture resolution. Then painting using brush tool in Blender. There are 15 different cat texture painting based on the cat color pattern like tuxedo (black-white), tabby, calico, mono color. This picture below is the texture painting of ginger cat.



5. Rendering

Here is the result after rendering in Cycles, with 2500 x 2500 px resolution and png file format. For the f version, please visit my marketplace [Yacons Design](#).

