

Game Art Portfolio

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Link Video Island :

<https://youtu.be/e8txN7gvlug>

Island name: Darknia

Island Theme: Scary - mysterious

Introduction

Welcome reader!

In this document, you will read how I filled up an island full of 3D models with textures and everything.

But let's first start with what the island is.

The name of the island is Darknia, Darknia is very dark (surprising) and described as scary and mysterious.

On the island, there are many models that all have their own stories and process how they are made, which together have become the story of the island.

I will show my 3D models with stories, sketches, silhouettes, artwork, methods and everything else needed to make 3D models.

Don't forget to look at the end for some secret experiments outside the island!

Story Island

The story of the island is a mystery for the majority of the people, if people have even seen it. The island is isolated from most of the world and has only three inhabitants—well, one if you don't count the monster in the sea and the zombie.

The story is about Ashkala who ended up on an island with her love. When she came to the island, there was really nothing except for a lighthouse which was abandoned, a tree and a sword that was stuck in the rocks. Ashkala was very intrigued by the sword, but had her doubts. Her love without hesitation tried to grab it and before you knew it, he fell to the ground, and there was no sign of life. Ashkala, devastated by the death of her love tried everything to bring him back, but with no luck.

Years went by and the island had one inhabitant. Ashkala who has gone mad over the death of her love. The island went from empty with a few objects to more developed with a path, lighting and some mysterious objects. The stories tell that Ashkala fixed the lighthouse and then set sail to find magical and technological items to bring her love back. A mysterious yellow crate that could revive the dead, a machine that could heal humans, but Ashkala already tried everything with no luck. Her last option was to dig her love a grave.

One day, Ashkala became furious. She then used her magical powers to revive her love, but she knew he wouldn't be the same. He became a zombie that was stuck in the ground. With him becoming a zombie, the island turned dark, the waters became red and the sky was extremely dark. Ashkala came back to her senses and saw what she had done, but she isn't powerful enough yet to fix her problems.

Luckily for her, she has a lighthouse that might one day get someone to her that could help her out since her own boat is broken. Also in the water is some monster that, for some reason, hasn't attacked the island.

What will the future be for Ashkala and the island?

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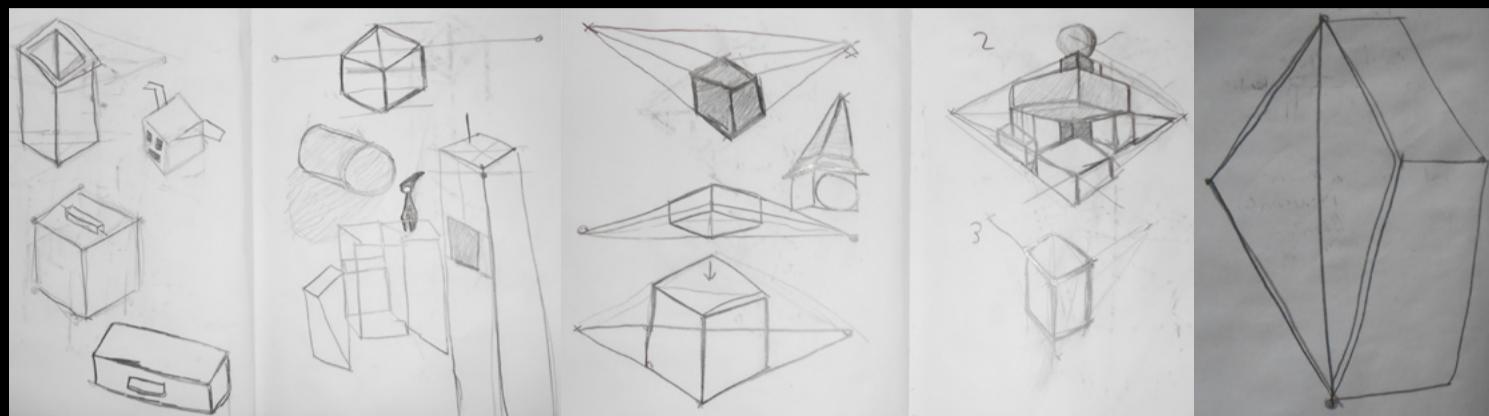
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Enjoy the journey

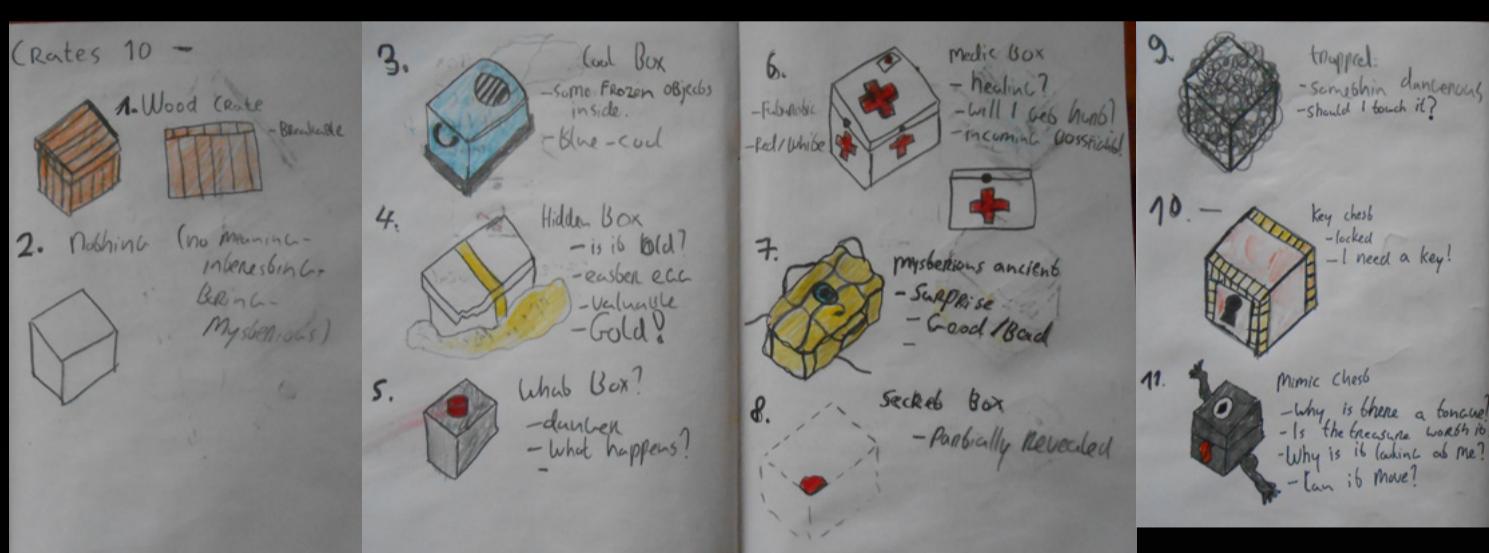
Crates:

The Journey of the island and the course started with making a crate. A crate is a great way to introduce yourself to 3D modeling because it shows all the possibilities what you can do with a basic shape. Aside from the shape, the crates can tell different stories. Should you pick it up? Will attack you (mimic)? And those stories can change your game.



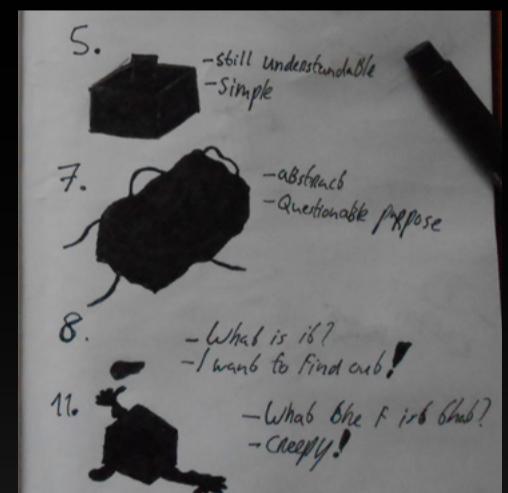
Basic sketches:

To make a crate we started with some basic sketches to create basic shapes.



Crate iterations:

I made variations of different boxes and their possible purposes. For me, 5, 7, 8, and 11 were the most interesting. They had different purposes, and I wanted to go further with them.



Silhouettes:

The silhouettes show three different crates, which can be seen even in silhouette form. I personally think 7 is the most interesting, which I want to go further with.



Artwork:

Story:

The box has many iterations, all of which have a different purpose, but at its core, it's about something unsettling but mysterious, and it has the right size to fit a human in it. You are drawn to the crate and want to find out what's inside. Maybe the crate has some unique items and wants to help you out. Maybe the box turns evil and wants to grab you.

Sounds:

Minecraft end portal:

A mysterious sound that attracts players to this mysterious portal with who knows what will happen.
<https://www.youtube.com/watch?v=PGxPoQbNytY>

stone door:

The crate is pretty heavy and made of something like stone. Opening you will hear stones colliding with each other.

<https://www.youtube.com/watch?v=168NBT32f44>

Reflection class (artwork):

+Story: You explained during class clearly why the crate does like this.

- The artwork is not sketch. I choose to make more finished artworks because I wanted to show that I knew what I wanted to make.

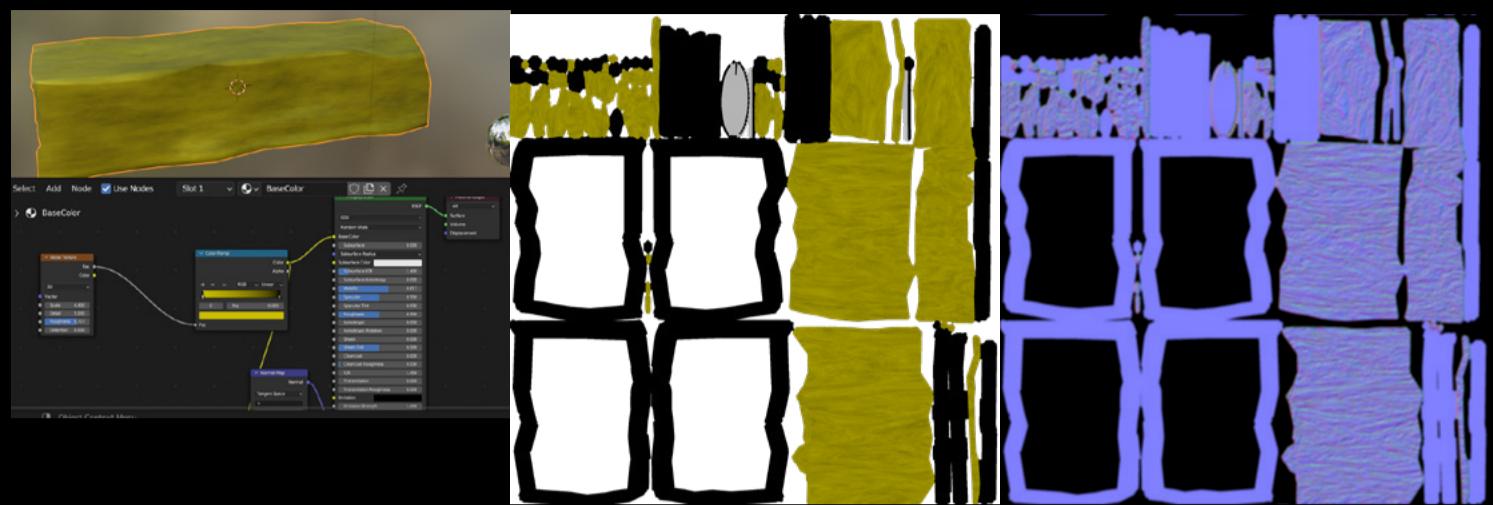
Crates:

Crate 1:

Story crate island:

The mysterious crate is on the island without anyone really knowing why (at first), it was just there; however, it made some off-the-earth noises.) Stories tell that it contains ancient relics with forbidden powers, and some talk about a sorcerer that has taken it to the island.

I also made it gold to make it look really valuable.



For the diffuse map I used Blender to bake the textures on the UV map, then I used a normal map generator to give better details to the crate.

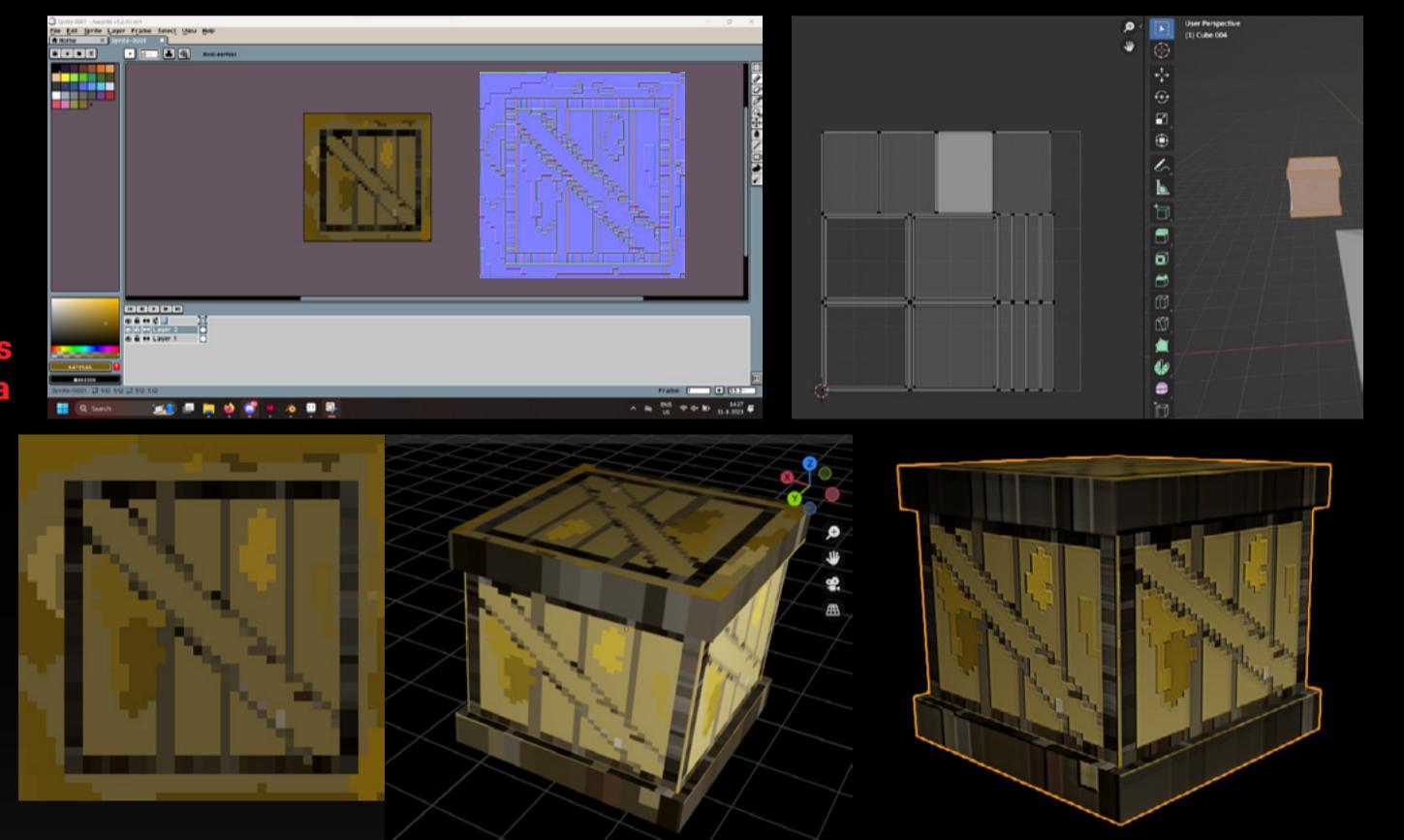
Crate 2:

Story crate island:

The story of the wooden crate is one of serious ignorance. It's clear that something fits inside of it but who knows what's inside. It doesn't have any marks or signs but it looks like you could smash it easily with a crowbar (half life).

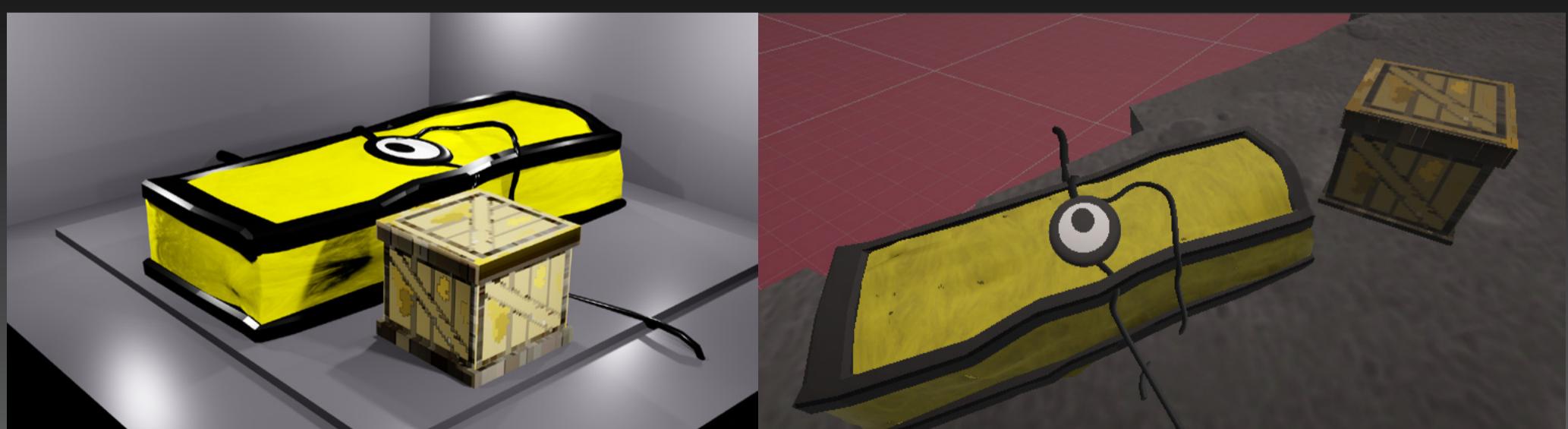
The crate is also dirty so it might have had a rough ride, or be old.

For the second crate I wanted to try a different approach and make the textures by placing all the pixels. The result was a kind of pixelated but understandable shape.



Boxes combined:

One core thing for the first crate is to use baking in blender. Making a new UV, then letting Blender make the textures. I made a texture with shading, but it needs to be baked because Unity is allergic to Blender shading!



Reflection:

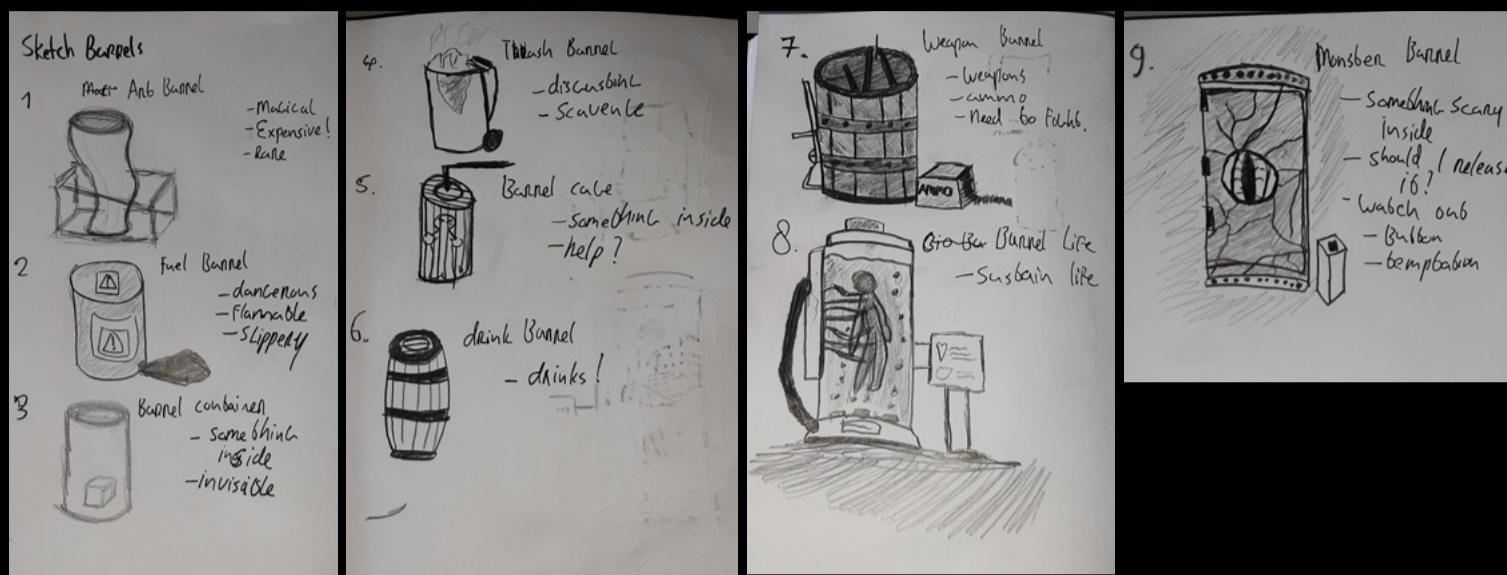
In the end I could make two different crates with their unique styles and could rephrase some earlier learned subjects like normal maps. However I still see some ugly vertexes with the yellow box and some weird light bugging.

Why did I choose these boxes?

I wanted to work in 3D modeling to create two totally different boxes with different purposes. Whatever something mysterious or pixelated simple box. Additionally they had two different work methods. Crate 1 was made with Blender shading and the second crate with Aseprite pixels.

Barrels:

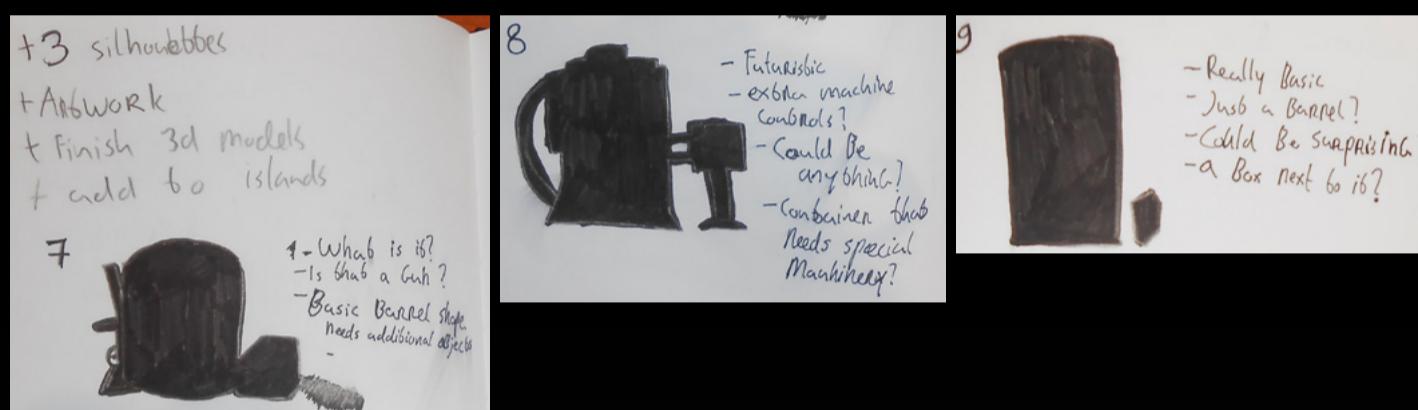
After creating a crate the next shape is a barrel. A barrel just like a crate, can have a lot of variations, stories and purposes, whether it is in a game or an animation. Does the barrel contain toxic fluids or is there a monster inside of it?



Crate sketches:

9 different variations of barrels with different purposes. I found out that without taking a barrel literally and looking at the shape you can make some unique stuff!

You can make an expensive art piece or a human preservation machine.



Silhouettes:

Three silhouettes of my favorite barrels. While I think 7 and 9 look cool, 9 lacks content except for a mysterious black box with a button, 7 is cool but already gives a lot away like the gun on the side.

8 is still mysterious as to what it exactly is.

Artwork:

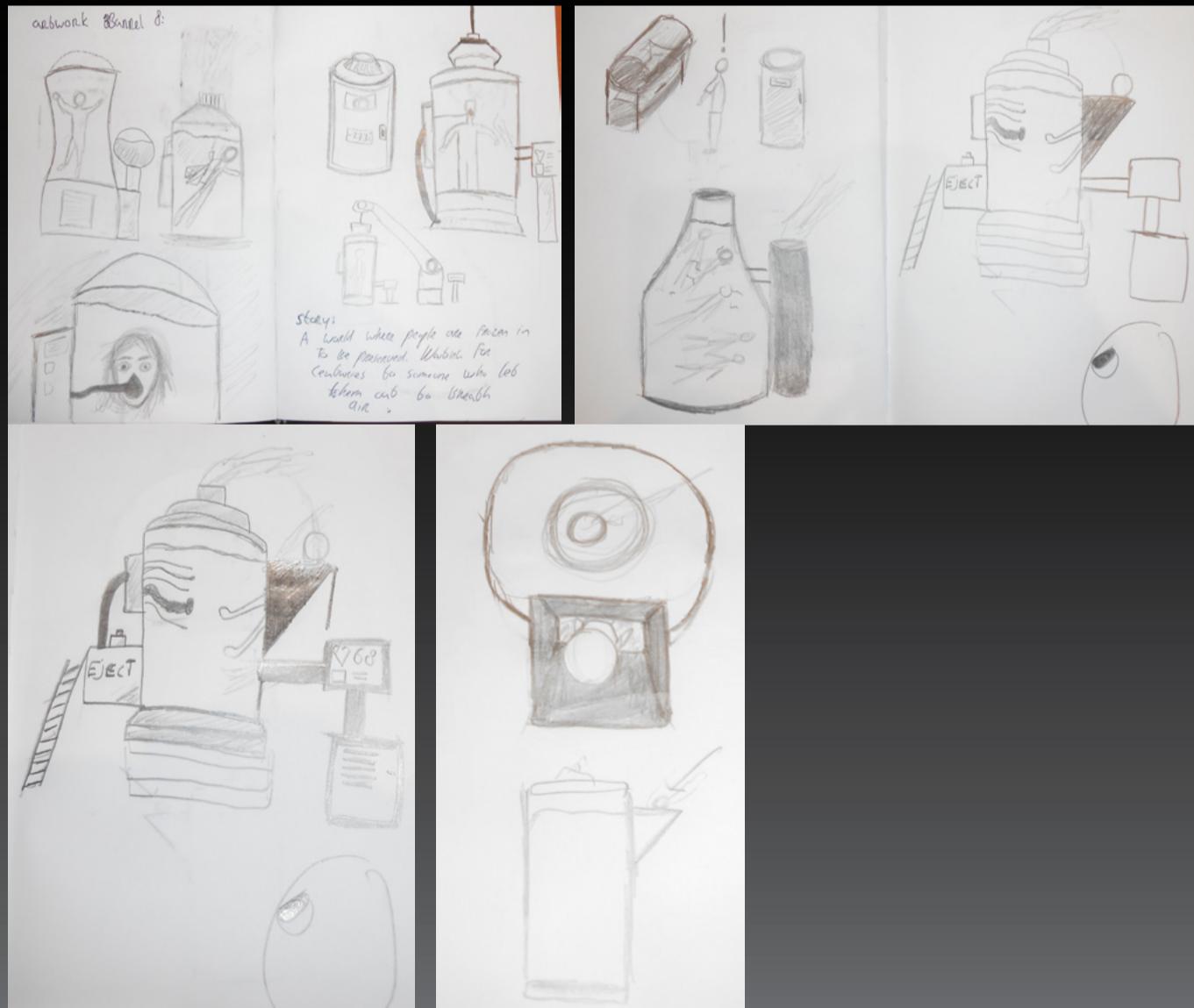
Making iterations for my barrel. I was making a story about humans being cryo-freezed for centuries. I thought about how it would function and how it could be used.

Furthermore, I chose a more technological approach than some magic because I wanted something that was made with a different approach to design. It has more light, uses metal and glass, and could have a different story than the crate.

How would you release someone?

Story:

The machine was used to save someone but sadly, it didn't work and was later buried. The machine looks very new but is empty on the inside. What was in here?



Reflection (artwork):

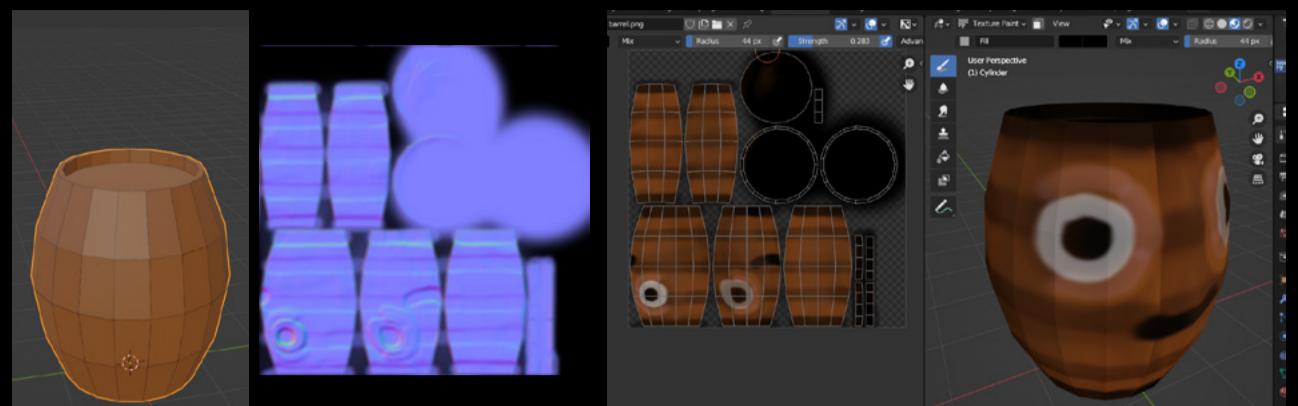
- + Story: I could think about a barrel that is different from the previous objects, but with the story, it could be part of the island.
- The artwork is more sketched, but some models look pretty advanced to make. Mostly with adding a human body to the barrel.
- + The artwork gave me a good idea how and what I want to mode.

Barrel:

Barrel 1:

Story barrel island:

A barrel that looks pretty normal until you turn it around and see a horrifying smile on it. Why does it smile like that? Is it alive?

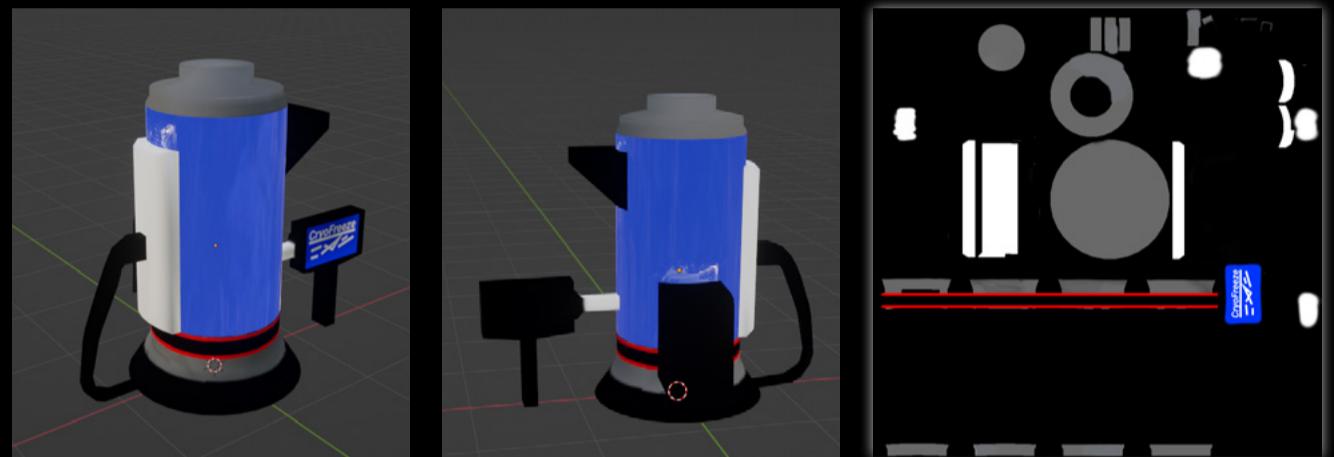


I wanted to make a more standard barrel with the other one so I modeled it, but it didn't feel like my island so I painted a weird face on it that makes it feel more scary and alive.

Barrel 2:

Story crate island:

The story of the machine was that it was used by an insane sorcerer who wanted to revive a loved one but failed. Who knows what's inside now?



Barrels combined:

Story:

After you entered the island, you heard about the machine but had no idea what it was and all of a sudden you saw it. Upon investigation, you saw a... Barrel? Inside of it. You were scared because it looked at you with glowing eyes. Maybe the stories about a sorcerer are true.

Reflection:

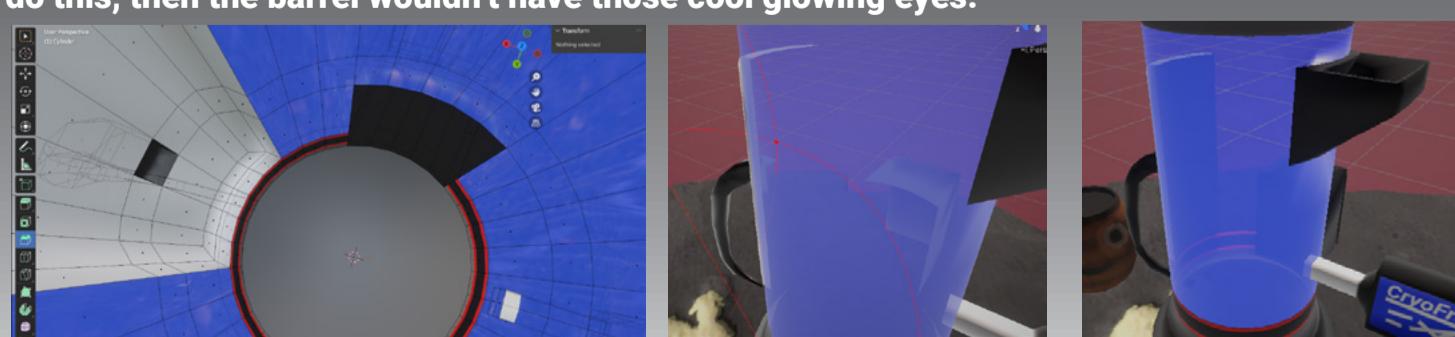
When I look back at the barrels, I am really happy with how two different approaches and designs could work out. In the beginning, I had no idea what the connection was between the two barrels but now in combination, I see a great element and that is pretty scary.

Why did I choose these barrels?

I wanted something that really resembles a barrel if you ask someone what a barrel looks like, but I also wanted to have some more abstraction of that term and create a cool object with a story.

What didn't go that well?

When I imported the machine into Unity and made the glass transparent, it was empty inside. I later fixed this by filling up empty places and setting the render mode on both sides. Another issue was that the lighting on the island didn't work. I ended up working with the rendering and some settings of Unity and the project, which eventually worked out, but I had to do some research. If I didn't do this, then the barrel wouldn't have those cool glowing eyes.



Foliage:

Foliage is about life and displaying nature, but what if your nature is all about scary things and maybe even death? I made ideas for scary foliage that would show the scariness, and I took many inspirations from Halloween and autumn.



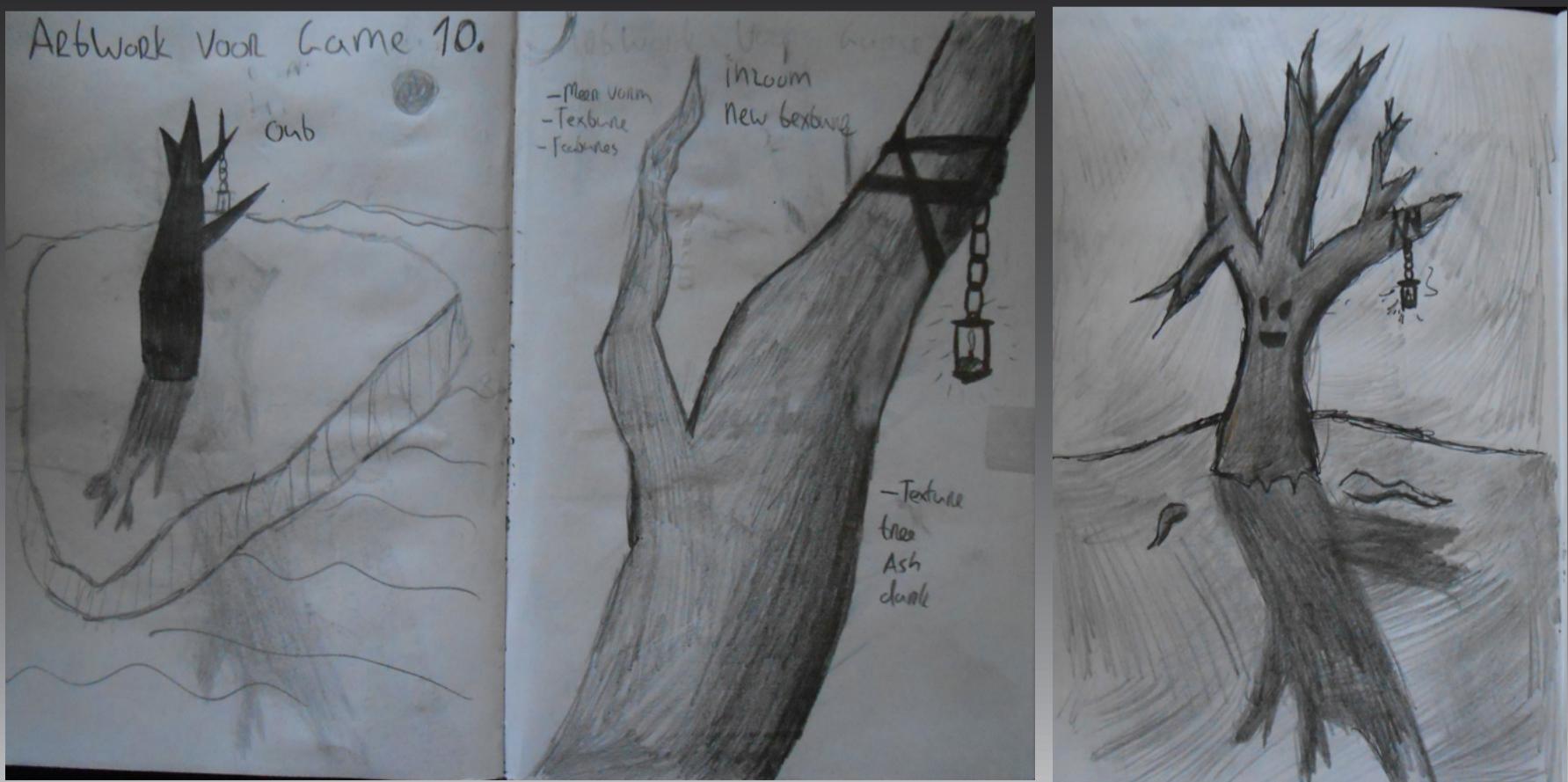
Artwork:

With the artwork, I could show the one who has to make my model (Wes) what I wanted. It showed the shapes of the lantern and what type of texture it needed.

Story:

The story is about a tree that has been on the island for a really long time. He looks scary but is actually pretty nice, which you wouldn't guess if you saw his surroundings.

Outside of a personal story, it also shows what time of year it would be if the island were in our world.

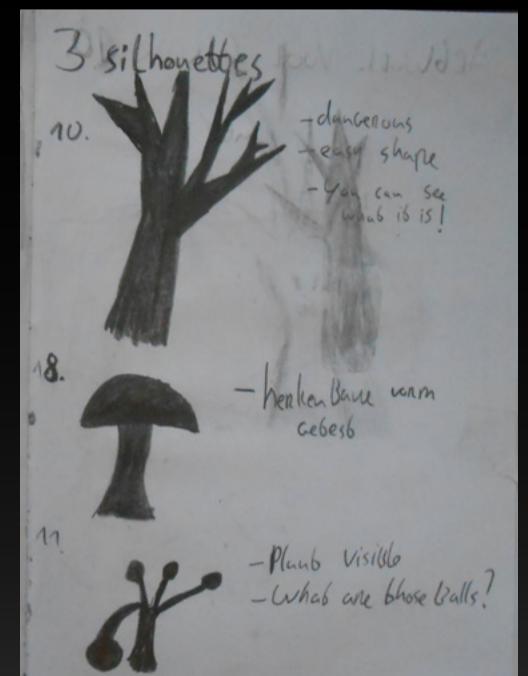


Crate sketches:

The sketches vary from big trees to a new ground for the whole island. I thought about a lot of things that would be possible for my island because there are so many options.

Silhouettes:

With the silhouettes, I saw three cool ideas for my island, but because I wanted to create something big that could alter the island a lot, I chose the tree.



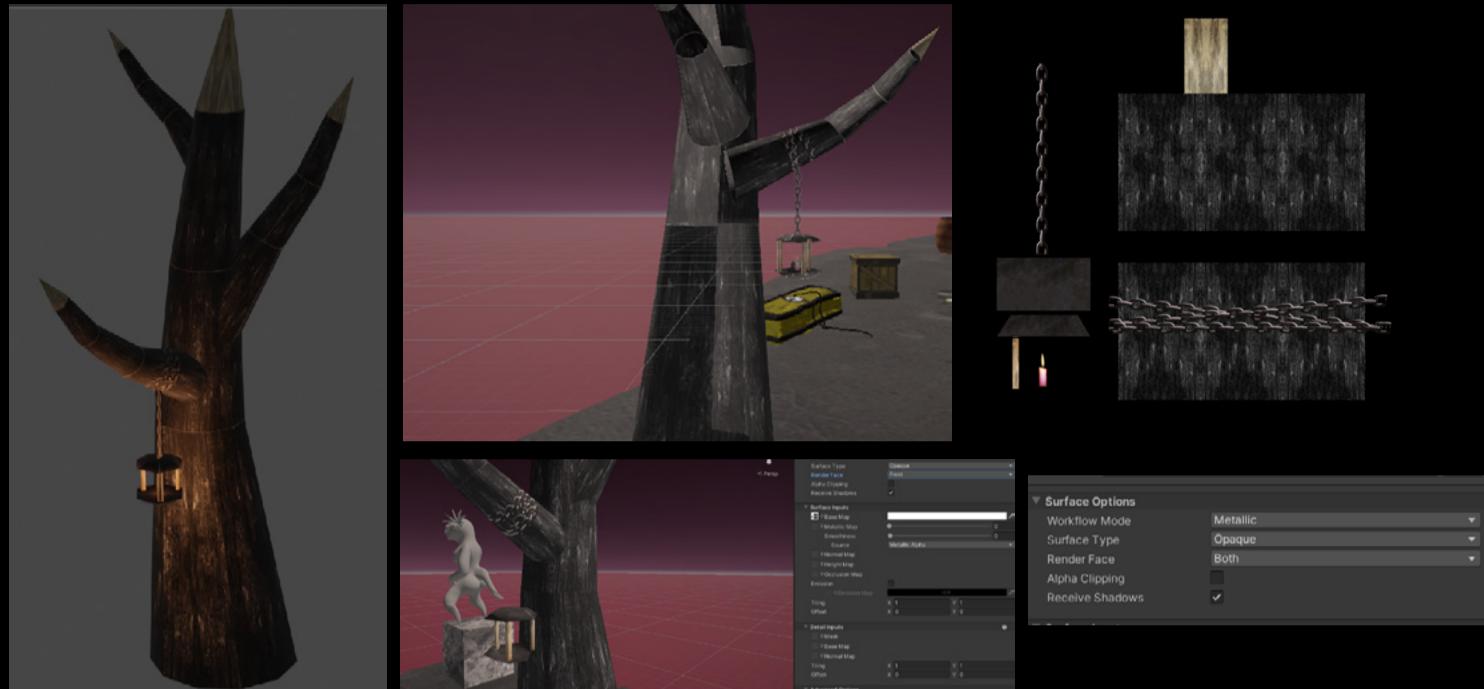
Foliage:

Foliage (Wes):

With the sketches, Wes made a cool model. The only thing I missed was the face but without it, it was still awesome and told the story.

Story with model:

The story of the tree is about the world it lives in. The tree looks dark and has no more leaves. It only has some light attached to it, which means someone has to be on the island to place and lighten the candle.

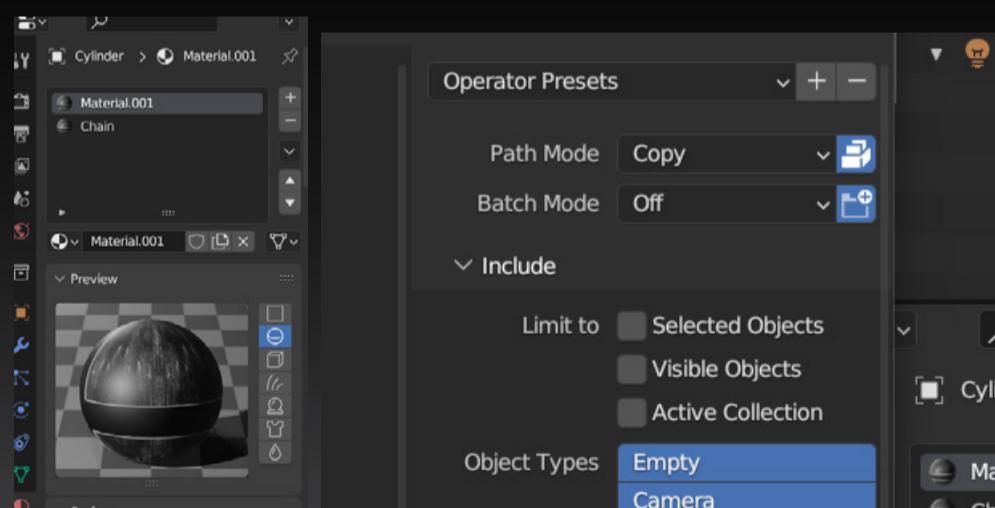


While the model looked really cool in Blender, in Unity it had issues with the render face, opacity and texture.

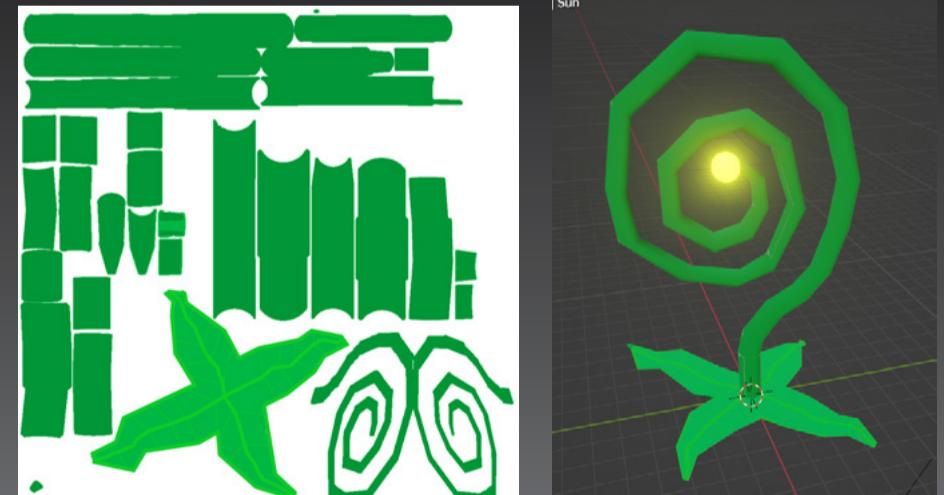


Objects	1 / 3
Vertices	236 / 236
Edges	432 / 432
Faces	206 / 206
Triangles	376

Low poly.
Tree is now alone but if you would have a big forest then the amount of polys might be lower. The tree has basic shapes with good detailed textures to make it really good. You don't need a lot of polys to make something good.



I finally fixed it! I made the chain that had to have transparency a separate object with its own texture, so now the whole tree has transparency.



Foliage (for Wes):

While it's not a part of my island, I am happy to make a model that is not in my own style, and I also made an additional component to add a light in the centre.

Reflection (overall):

- + I really had an idea of what could work for my island.
- + The artwork gave a good direction for Wes to work with, which is important for concept artwork which a team might have to work on.
- + Even without the face on the tree, I could still make a story which is more about the surrounding and someone on the island.
- + Fixing errors with the model so it looks better than that it was.
- With a lot of variation comes also the downside of in depth focus. I am different things but saw that the trees kinda all looked similar. If I could give myself more focus, I could have maybe more variation in what type of trees I could make.

Props:

With props, I could add a lot of things that could enhance the island but also expand on the story.

Crate sketches:

I made different sketches from lamps to swords to have a broad spectrum of options. The purpose goes from horror to adding light to the island.

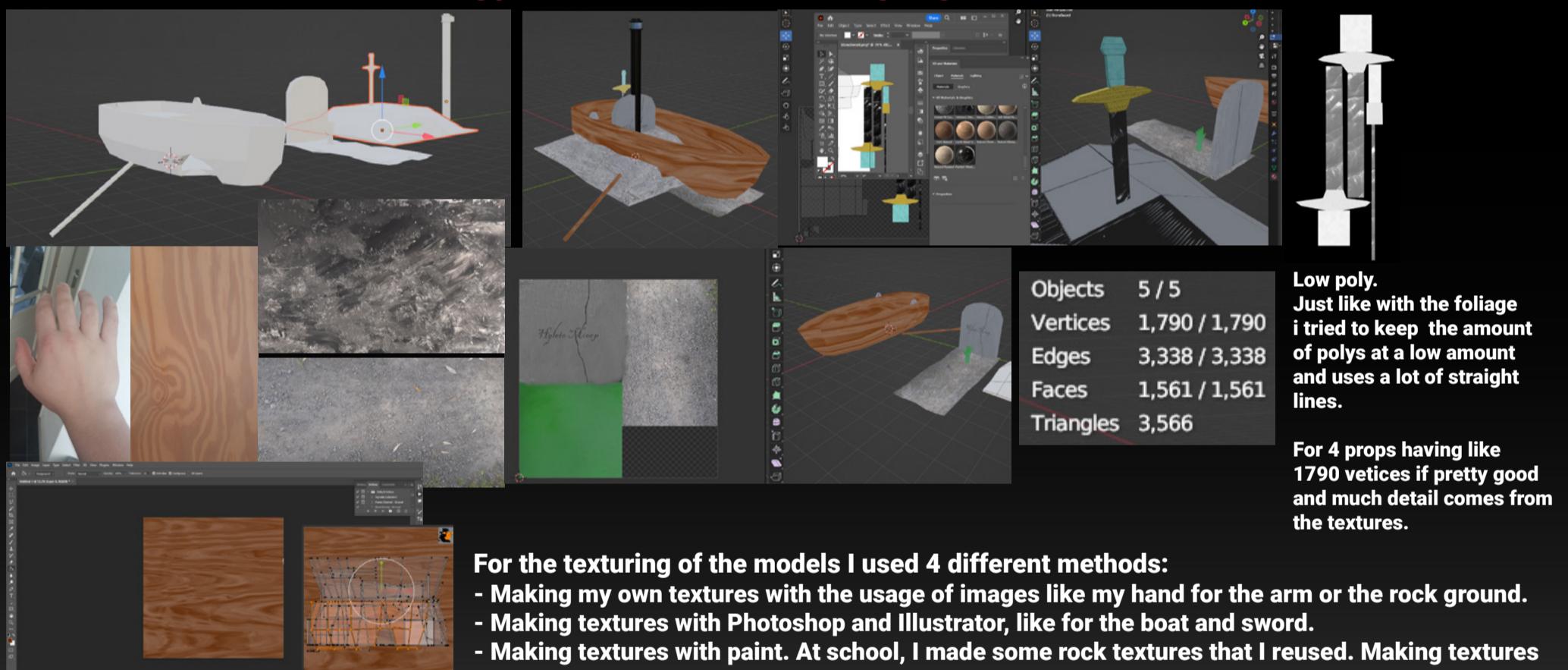


Props models and texturing:

For the props I made 4 models.

Stories:

The models I chose tell a story about the island. A ship that is no longer usable which means someone might be stuck on the island. A gravestone with an arm sticking out—who is this person? A sword that is, for some mysterious reason, stuck in a stone. Also adding lantern posts that emit light with the use of candles. The lanterns tell us that someone must have been here for a long period of time and made solid lighting.



For the texturing of the models I used 4 different methods:

- Making my own textures with the usage of images like my hand for the arm or the rock ground.
- Making textures with Photoshop and Illustrator, like for the boat and sword.
- Making textures with paint. At school, I made some rock textures that I reused. Making textures with shaders like Blender for the lanterns.

In the end I could make 4 models with different approaches to making textures. For the sword, I also used a specular map so that the sword is shiny but not the rocks.

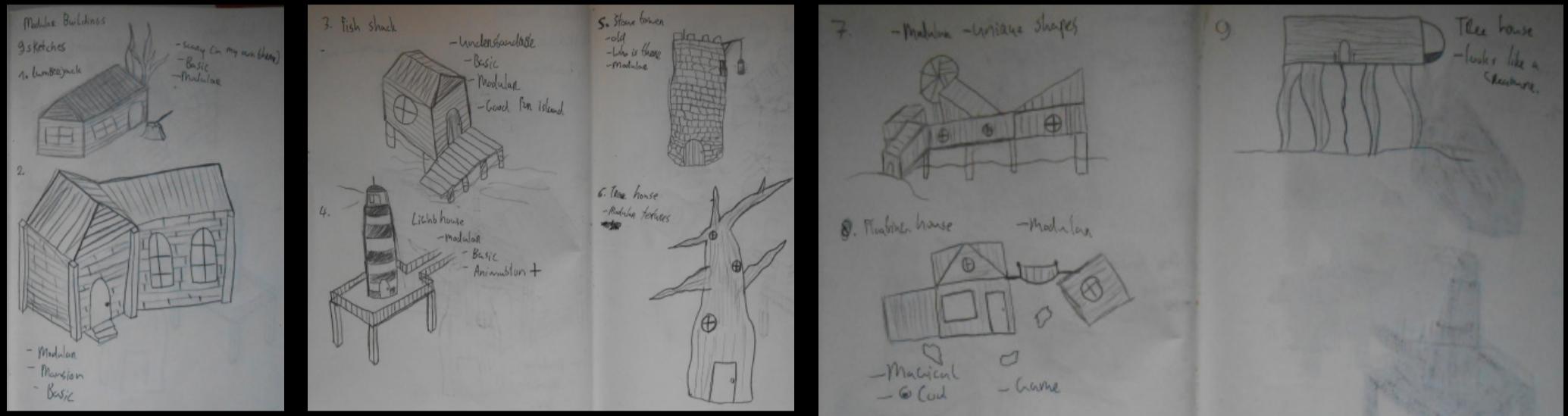


Reflection:

- + Happy with 4 models with a story for the island.
- + 4 different approaches to creating textures.
- Some approaches to making textures, like making pictures, can be impractical because of lighting. One side was brighter than the other which sucks if you want to make it seamless and making textures with Photoshop can fix this issue but some more advanced materials take a lot of time.
- I made 4 different textures but maybe one big textures with the 4 props on it could be more practical in some instances.

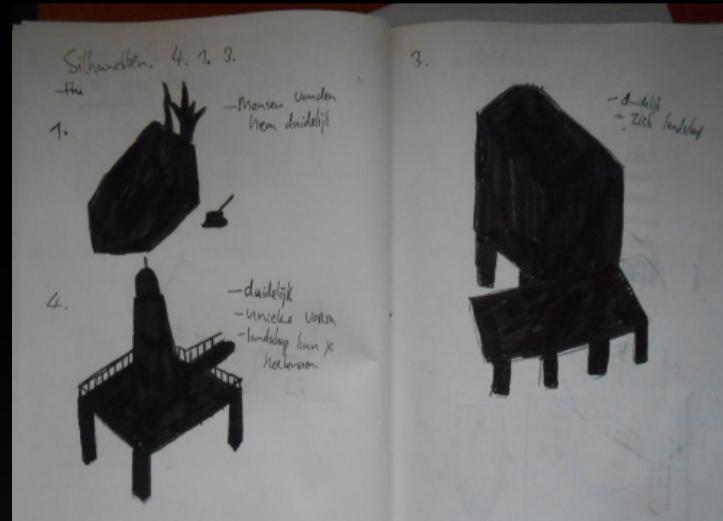
Modular building:

Modular building is one of the most important things when it comes to modeling a world for your game. If you want to make something like a building, you want to reuse parts to save time but also textures and overall space. I made a modular building that could be changed.



Modular building sketches:

I made a variety of different buildings that use different materials, shapes and textures that could be placed differently.



Modular building silhouettes:

I chose tree modular buildings which I could find an interesting story with but also have the right shapes to build something with.

From the silhouettes, I liked the lighthouse the most. It had one strong, unique shape that shoots out but also has a cool surround, which could be very modular. Also I could think of some cool story for it. The lumberjack house looked very basic and could be anything if it weren't for the axe and some trees around it. The fishing house could also be cool, but felt not that unique compared to the lighthouse.



Modular building artwork:

For the artwork, I made different sketches that showed different parts of the story. A lighthouse that is in the middle of nowhere on a dark island. Why is there a big lighthouse on a small island but no other buildings around? Does someone live in it, and for what is it used?

Outside of a story in the artwork, I made use of colors and have drawn some textures to show the one that makes the modular building what the building and the parts are made of. I want the lighthouse to look very well maintained which shows that someone has to be on the island to look after it and that the light still works.

Modular building:

Modeling the parts:

Modeling was, for me the most fun part. I used modifiers like boolean and array to create planks with one big hole that could also have its own story, like how it could be used for fishing.

In the end, I made loose parts that could be assembled in multiple ways and had one core aspect that stuck out.

Intended (the lighthouse). I also made an example model how you could build the house

For textures I made pictures that inspired me when I went home. Again, with pictures, using them seamless was an issue. And had to edit and play with light.



Objects	11 / 13
Vertices	3,593 / 3,593
Edges	6,777 / 6,777
Faces	3,312 / 3,312
Triangles	6,946

Low poly.

The poly count was pretty good for all the modular building blocks. They have to be pretty low because if you are making a whole building with it, you don't want to use a lot of polys. The lighthouse used a small amount, which I am very happy with.

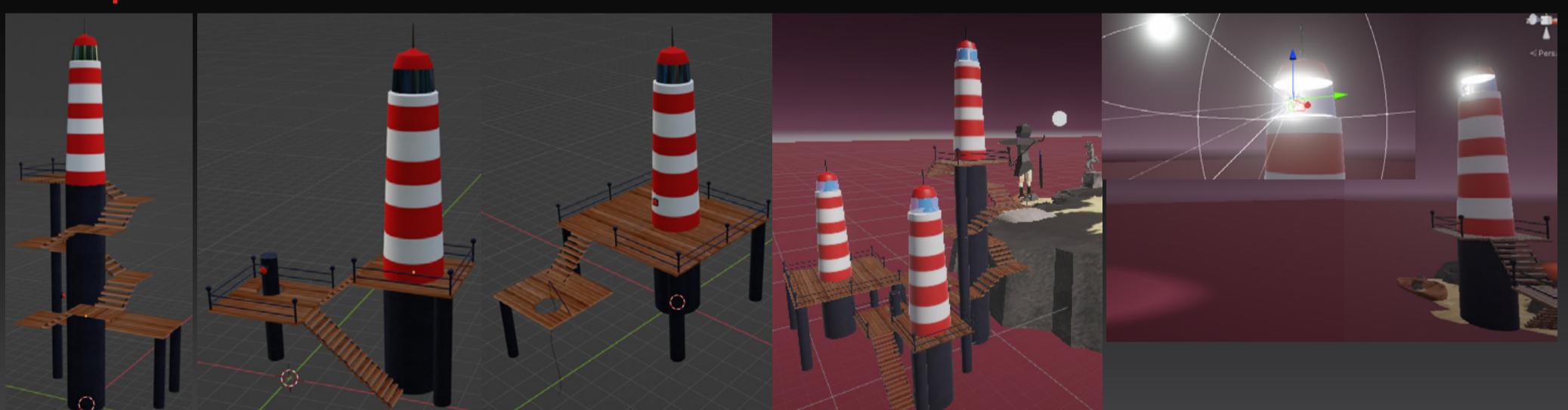
One mistake I made was that the black railing used a lot of polys. This was mostly because the endings were round and used a lot of vertices.

Buildings made (by Wes):

I gave Wes the Blender file with my models. In the end, he made three really cool models that had interesting variety. I liked how the stairs are used and the mysterious button. The building made me think of some kind of platformer game with all the possible ways to place the platforms. The one I liked the most was the one with one button when you walk up the stairs. The building is basic but very mysterious, like why is there a button? It also has a working light that goes around the island!

Story with the buildings:

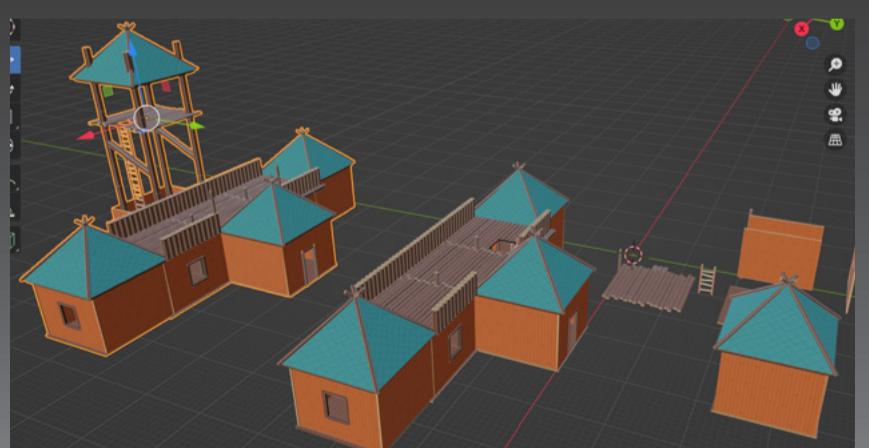
The building is mysterious. Why is this lighthouse here on a dark island in the middle of nowhere? There is nothing here. Maybe the island was used for traffic, but something might have happened. On closer inspection there is a button there for whatever reason. Should I push it?



Making buildings with Wes models:

For Wes, another art direction. I had a cool idea to make some upgradable buildings that start as a small building but develops into a big base. This showed me more about how reusing stuff can be very cool.

Reflection:



- + I learned how to reuse models and textures to create unique variety and how much time and space you could save by building modular.
- + I could make a model package that someone else could use.
- Making an example building might already give too much away.
- While I really wanted the lighthouse, this decision might constrain someone from building modular. The exterior however gives a lot of options.
- The poly count on a few objects could become a problem if you use it a lot.

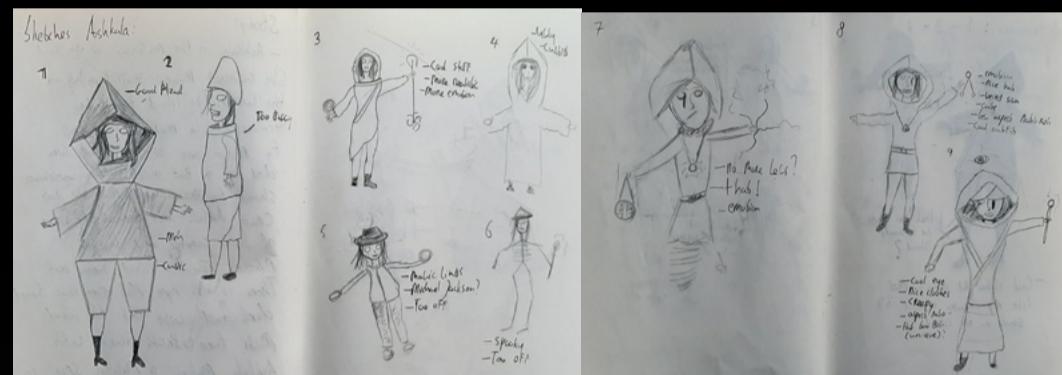
Character:

To make the story of the island more complete, I made different characters and worked one out that made everything the story logical. Why is everything on the island and who is responsible for it. I wanted a character that could tell that.



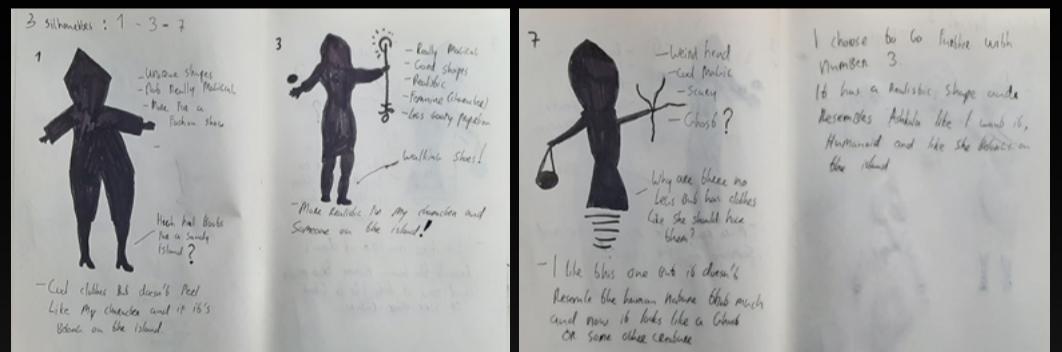
Character ideas:

For the island, I came up with three different characters that could be added to it. In the end, I chose Ashkala since her story was the most logical and compelling to me. She told the story of why she was on the island and why things were like that. The other two were just people that ended up on the island and had no idea what was going on, while Ashkala brought logic into the models but also kept it mysterious like she is herself.



Character sketches:

After choosing one character, I made iterations on her design which I liked the most.



Character silhouettes:

I chose three designs that looked very interesting. I ended up with a character that had realistic aspects, just like my island and objects, the other one looked too much like some fashion show, and the other was a scary ghost. Furthermore, I wanted a scary character who still felt human.

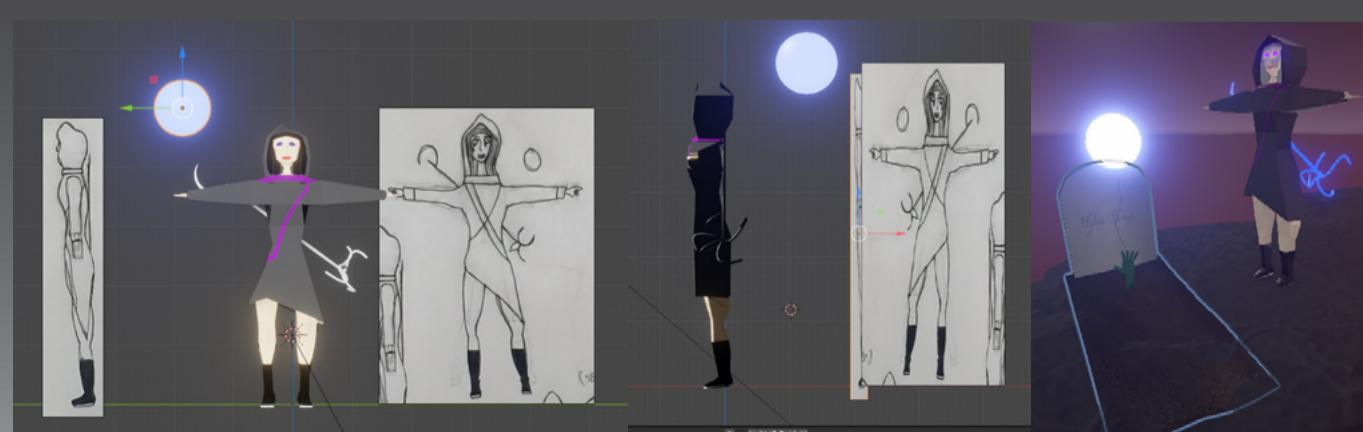
Character artworks and blueprint:

After choosing, I made some artwork that showed the colors, shape and type of the character. It also showed the one that Ashkala loves, who is stuck on the island as a zombie. After I was happy, I made a blueprint that I used for the 3D model.



3D model:

Using the artwork and blueprint, I made a 3D model of Ashkala and put her into the island to complete it. I worked a lot of glowing effects to enlighten the magical part of the character.



Low poly.
The character itself had around 700 vertices and was pretty low poly. I wanted to model a character that resembled Ashkala. The 2124 vertices are from Ashkala with the sphere and staff. The issue I saw was that the staff had a lot of polys. One of the reasons for it was that Ashkala was mostly flat planes while the staff was more round and was used with it more. Luckily, if I look at the fact that the most modern characters in games have 20000 vertices, I am pretty happy with the amount that I had in total.

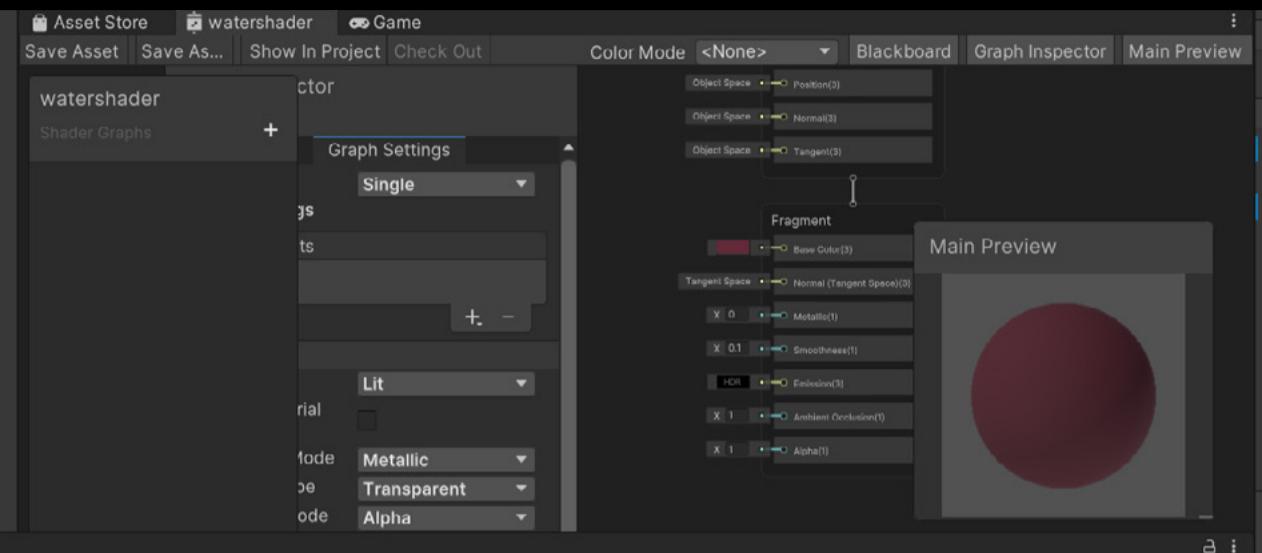
Objects	3 / 6
Vertices	2,124 / 2,124
Edges	4,118 / 4,118
Faces	1,987 / 1,987
Triangles	4,046

Reflection:

- + A character that completes the story.
- + Variation of characters and design.
- + Character good poly amount.
- + 3D model - The blueprint is asymmetrical which made it hard to use for 3D modelling.

The Island:

To finish the island I wanted to change the island itself as well.
The bright green island didn't fit so I made the island texture dark, changed the water shader and made the skybox dark.



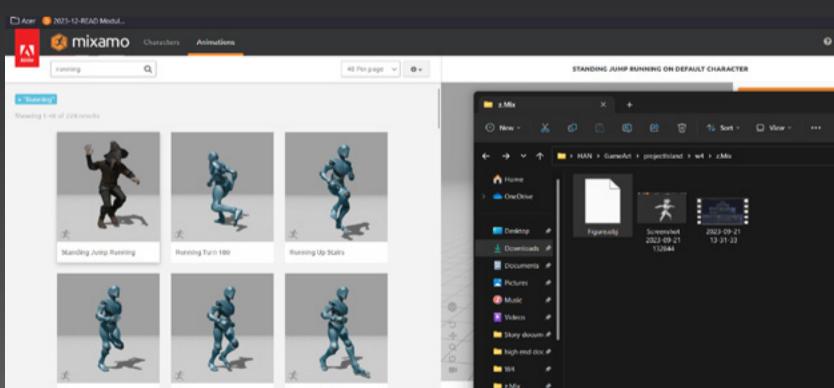
The monster:

One additional character to finish the island is the monster. Stories tell that the monster was lured by the big lighthouse when it was dark to find one spot of light in the world. I really like the monster because it was completely sculpted, which is something new to me. I also wanted to add something more funny to the atmosphere.

Horror games like Silent Hill also have funny things added for some distraction which I like.



First time using zbrush



Using Mixamo again to see the amount of options.
Tip: Watch out with extra things like having wings.
It will be seen as arms.

I made a texture using paint, which was pretty cool. Sadly, it didn't want to work on the monster so I made a stand for the monster to stand on.

Story:

The monster while looking scary is actually pretty nice and attracted by the lighthouse because the world is almost pure darkness and the monster has no direction to go to.



EndScene:

Link Video Island :
<https://youtu.be/e8txN7gvlug>

After working out my stories and finishing the models, then it's finally time to set everything at the right place. I made some earlier iterations but finally found a place for all my objects.



The main image that I chose from the island is a big zoom out like you fly over it.

What I like about this image is how the lighthouse is emphasized on the island, just like you would expect from a real one. It grabs attention and is kind of like a weenie (attracts attention to a distant object).

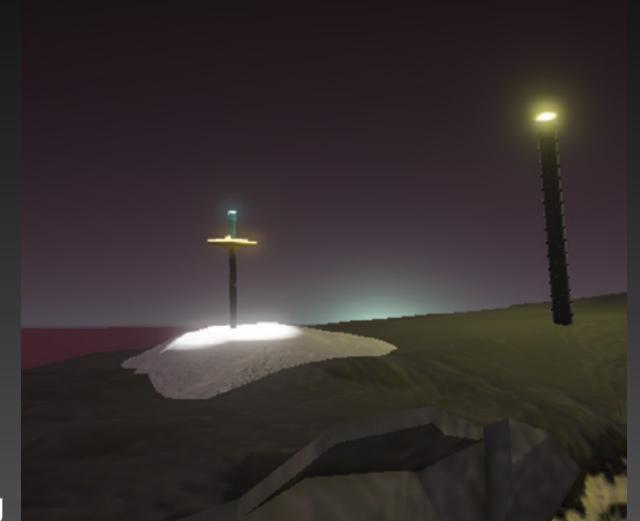
What also is cool is the monster that gets shined on with the lighthouse like there is something dangerous in the water.



I made some edits on the lighting so the path is brighter.
Ashkala worked really hard on it!



Ashkala is placed in order:
It starts with the mysterious crate, then the machine and ends up with her love coming from the grave.
The tree has a lantern attached to it because she had to make something quick to have light. She can't just place a whole lighting system there.



When you walk up to the island after the broken boat, you see the sword with a magical light on it. The sword wants to attract you and probably makes you die, just like the love of Ashkala.



I used the path on the island to bring someone to the objects. The path brings you to the crate, machine, grave and the lighthouse stairs.

EndScene:



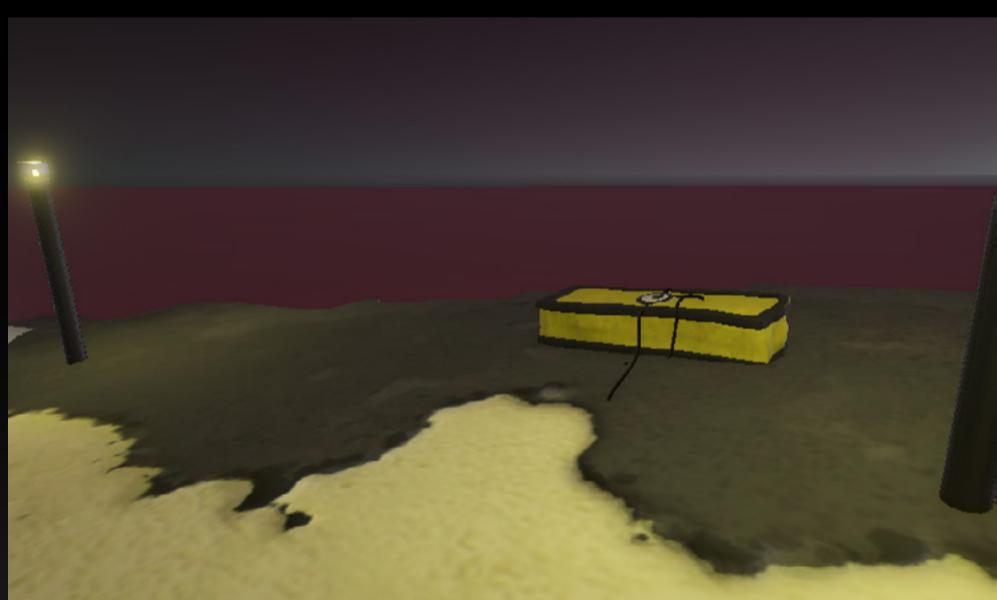
When you stand on the platform of the lighthouse you have a clear view what's on the island.

We can only imagine Ashkala seeing her failed attempts to revive her beloved.



I liked to take perspective shots from under the lighthouse to again emphasize how big it is. From the sky and from the ground, it has the same effect.

Also the crates are sunken a bit in the ground, which shows they are there for a long time and who knows why Ashkala has used them for.



The crate is left alone which has to do with Ashkala being done with it. Useless crate didn't do a thing as far she knows

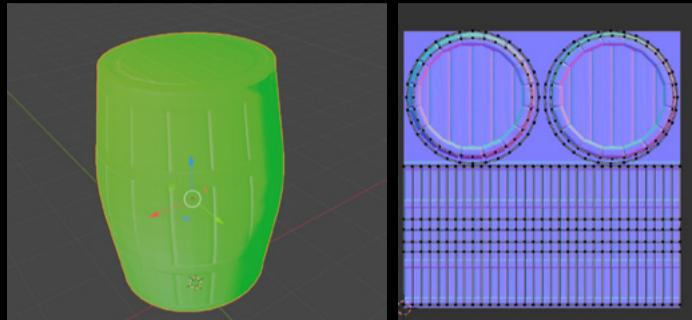
Conclusion:

Looking back at the project I can say I am really happy how it ended. The island looks in my opinion pretty good and that I really could shape my own world with my ideas. The only thing I had a hard time with was drawing certain things like a character however it still worked out since I could visualize my idea and make it into a 3D model.

I still have a lot of things to learn and when it comes to a game need to take a deeper look into lighting, you don't want to get blinded by a light during gameplay.

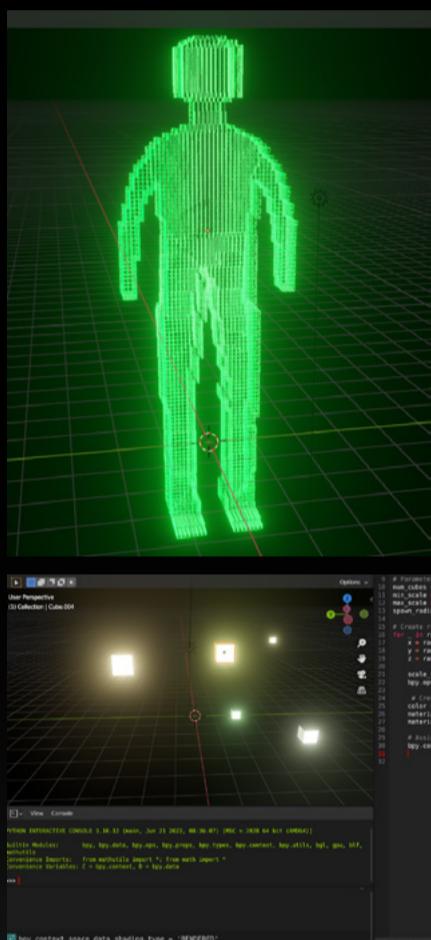
Secret experiments:

Before Week 1 and game jam

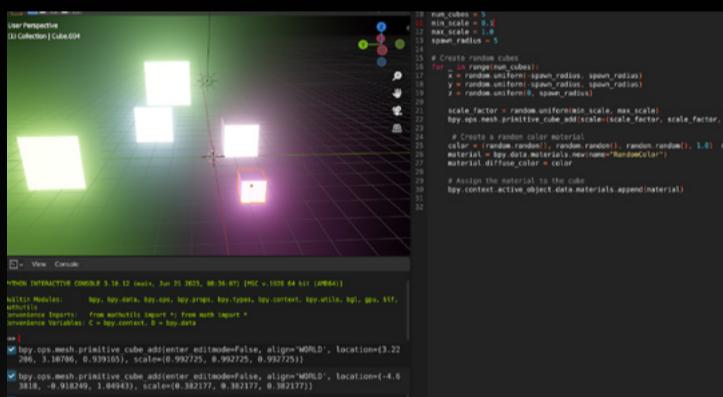


With previous experience and an online normal map I created a simple barrel. It shows that you can use special textures to make things like depth in models.

Link normal map: <https://blog.teamtreehouse.com/real-time-3d-web>



With a modifier, I made a weird glowing character that looked pretty cool. It might've been a ghost for the island, but in the end I wanted to keep it as some cool experiments.



With the usage of scripts and ChatGPT you can generate some interesting stuff in Blender!

Sadly didn't use it for the island but could be very cool for the project if I am part of the modeling team.



KOEN DORSTHORST - MIKA WISHRAUFT



With Aseprite I could make some pixel art for the game. I used interesting images online and my own art directions to create pixel backgrounds. And blocks in the game. With this, I could also make things for a 2D game.



A sculpting experiment in Blender. I have to say that I found Zbrush more intuitive which I made the monster for the island with.



Using Substance Painter again to show possibilities with the software and to paint models. With substance, I could make a robotic texture for a model and export the color, normal, roughness, and lighting all easily.

While it works pretty easily, I still find doing everything in Blender and other software like Photoshop my favorite workflow because Substance also needs preparation time and an extra subscription. which costs more money.