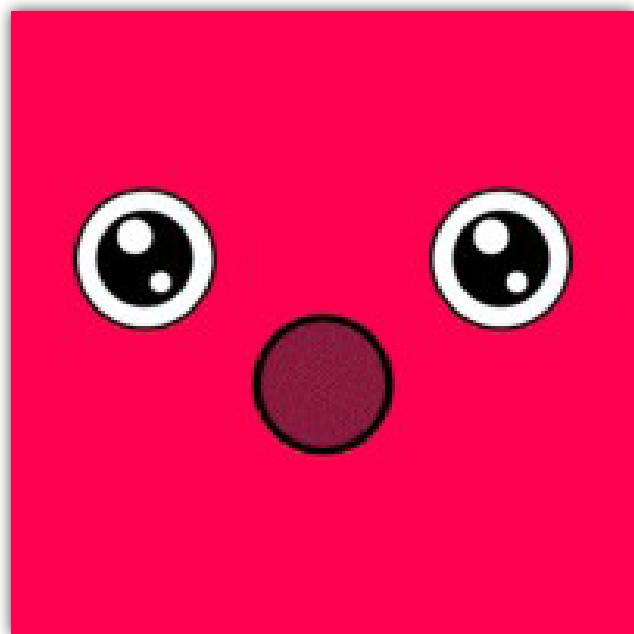


My internship at Arfected



By: Mika Wishaupt



About internship:

For my third year at the communication and multimedia design study at Avans I went to Arfected for my internship to pursue more knowledge in the 3D field, mostly for 3D modelling. At my internship I also learned how to make my own AR filters which was a new medium for me that has a lot of potential for the future. AR could be applied for simple filters for your phone but also to get it into new technologies like AR glasses that could help you navigate through the streets.

One of the most important things that AR filters learned me is to minimize projects so they run better and take less space. This skill could be a great addition in the 3D world from websites to animations.

Software examples used during internship:

During my internship I used mostly software like Blender and Spark AR but with these software there comes alot of additional software that helped me improve my workflow and possibilities.

A great example is After Effects. During the creaton of my personal project I created gifs that had to be animated and I knew that After Effects would work very well in these type of situations which led me to finding the right tools for a certain aspect of the design and development of a project.



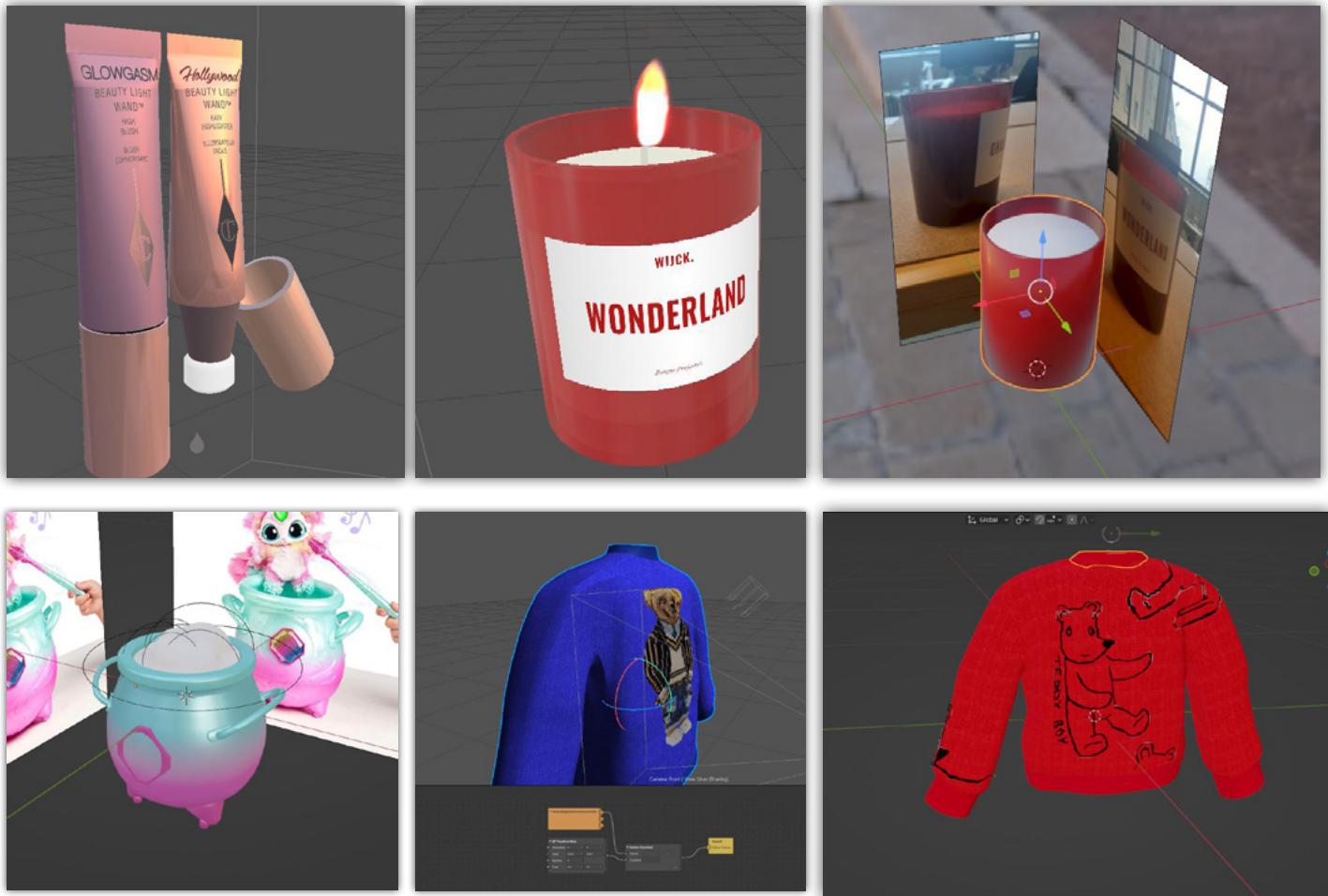
Projects Arfected (examples):

During the projects I had the time to improve my skills in 3D modelling with the usage of Blender, Substance Painter, Spark AR and Lens Studio but also could improve myself with soft skills which helped me to communicate better in my team and to learn to work in a professional environment.

Bijenkorf:

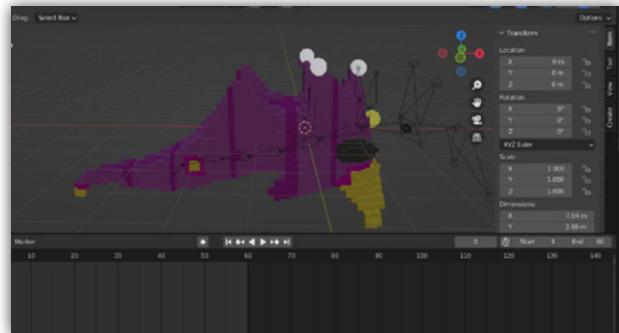
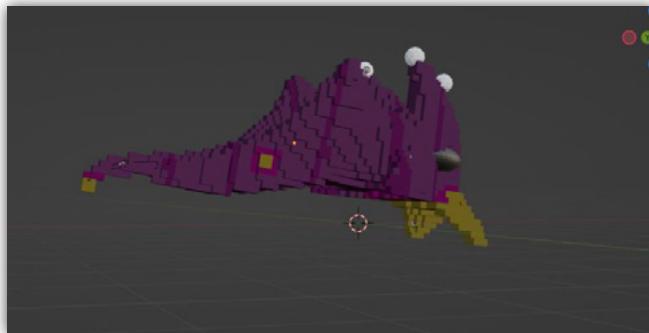
During my first real customer project I could work on an amount of 3D models which would be used for the Bijenkorf filter. During this project I learned to recreate real objects into a 3D environment which I could use from animation to game development.

Also with the projects I learned many new Blender techniques like texture baking which is one of the most vital parts of Blender if you want to export models to other software like Spark AR.



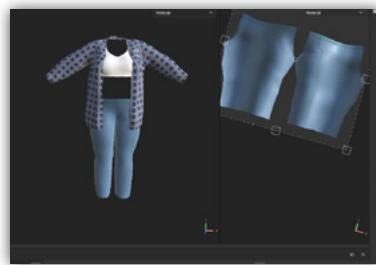
Other projects from Arfected:

In addition of Bijenkorf I also worked for other customers like Samsung and BNNVARA in a team.



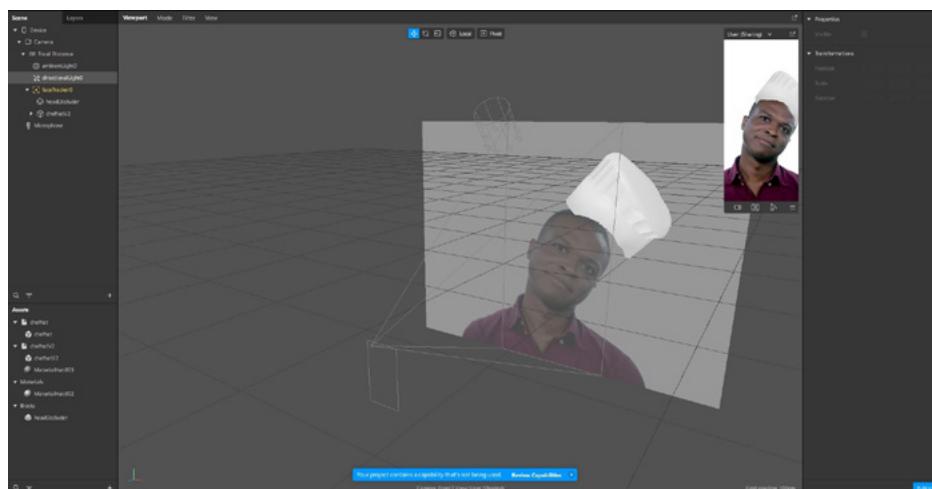
Creature:

Outside working on a concept with my team I worked on making a 3D creature that also had movement.



Clothes:

For a customer who I was familiar with I painted some cloth textures for a project. Sadly my textures didn't make it into the project but I learned a lot with working in Substance Painter.

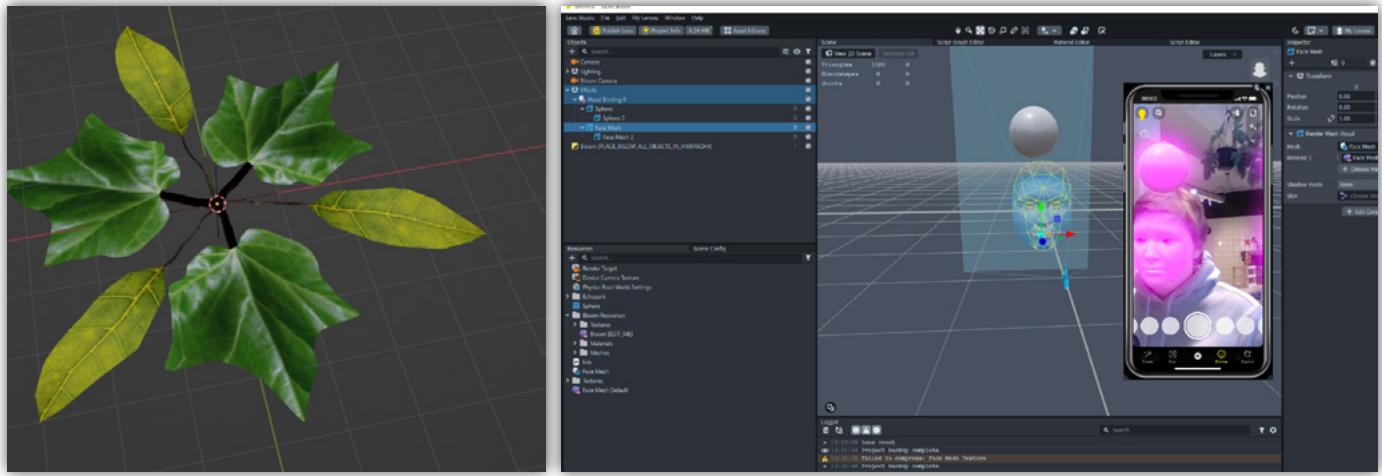


Chef hat:

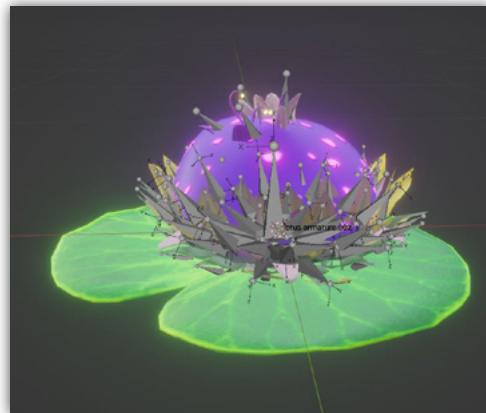
A small project where I made iterations for a chef hat and had to implement it into Spark AR.

Plants and filter:

During the last week at my internship I made some plants and a filter that could be used for a project.



Also I had to do some research to find usable assets which I made ready for the project.

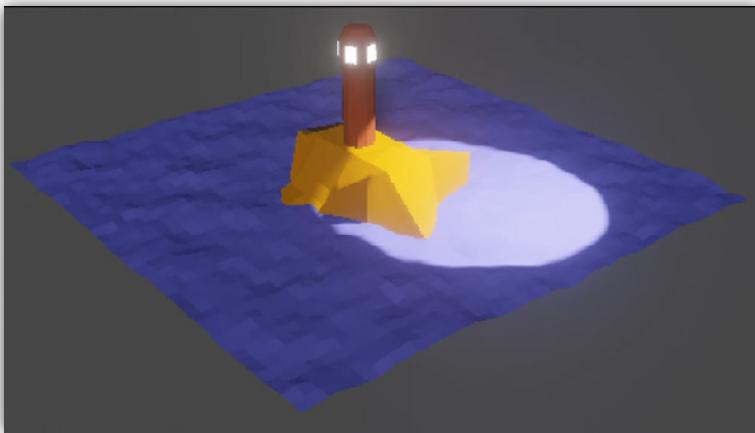
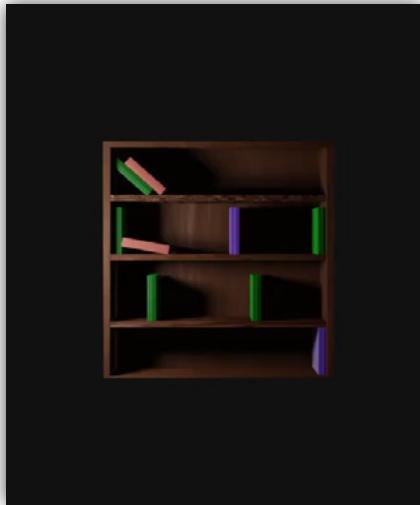


Small project examples:

Before and during the Arfected projects I already worked on some tests so to get some basic skills and research possibilities in the softwares.

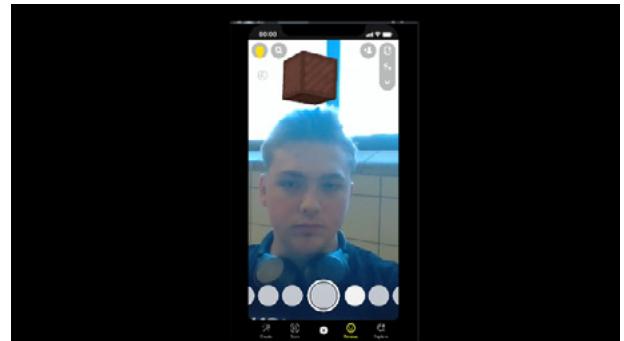
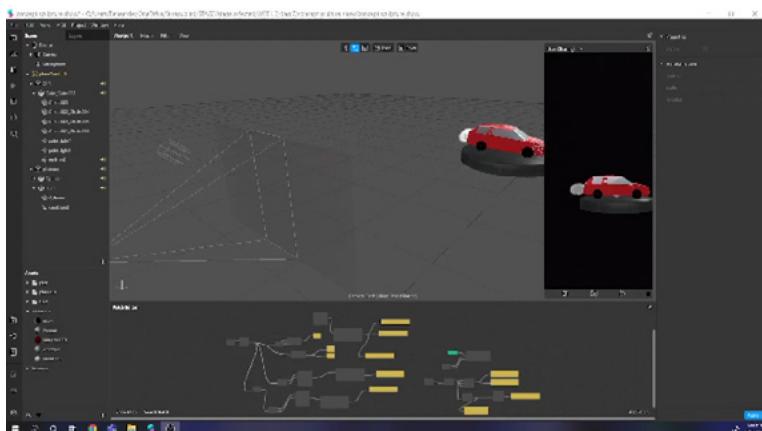
Some Blender tests:

To learn Blender I wanted to look at the software from different perspectives. from shapes to lightning. This helped me alot to work with Arfected but also with my main project.



Some AR tests:

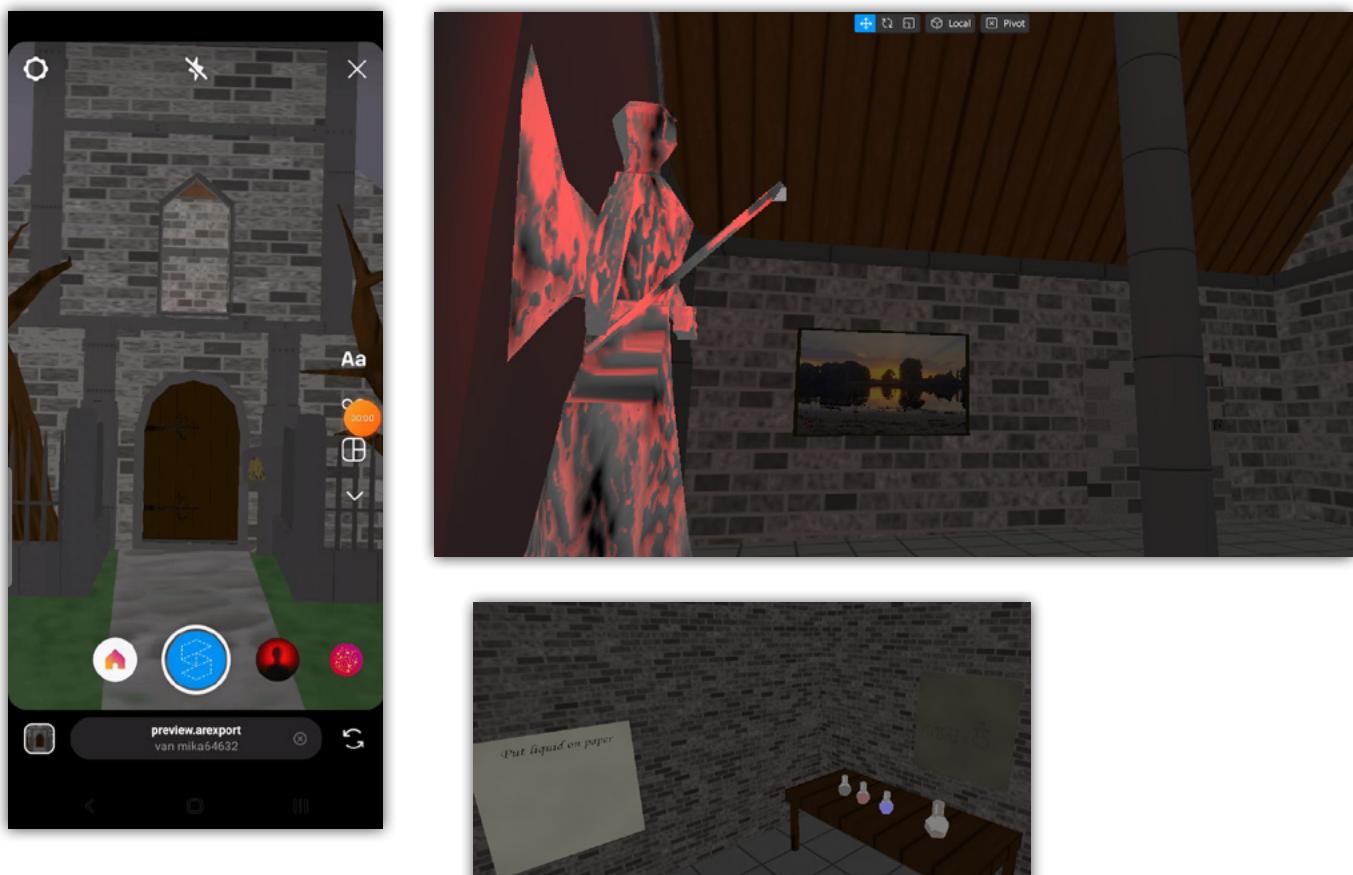
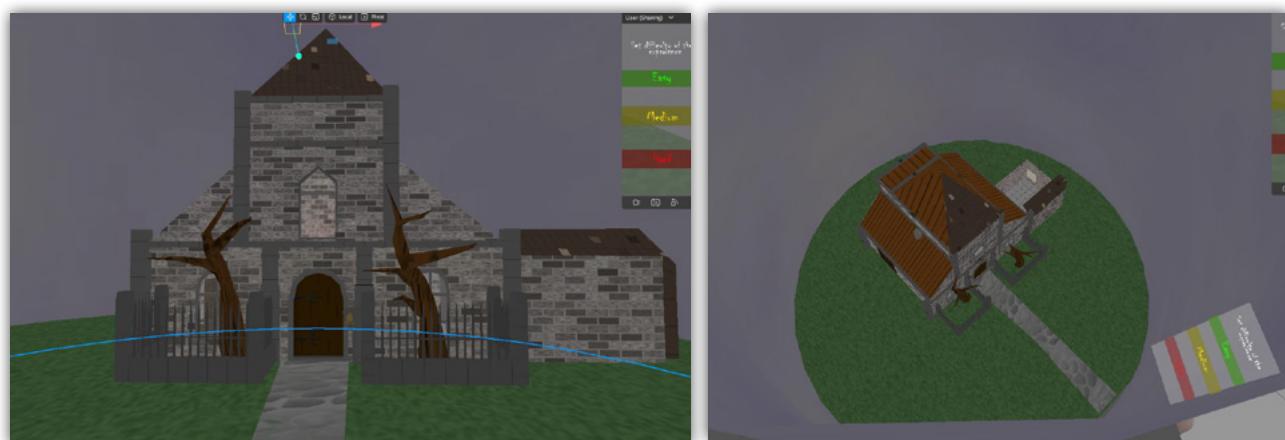
Working with AR was pretty new for me with the exception of a school project a year ago and to use AR filters myself.



Main project:

During my internship it would come down mostly on one major project.
For this project I had to do research, make iterations and work out something that interest me.

For this project I had the freedom to make something that interests me.
I wanted to make an escape room that people could play through their phones so they could have a new experience with AR but also for people that never went to an escape room to give them an online experience which could help them with making the choice of going through a real life one because an escape room can be tense.



Links videos:

<https://www.youtube.com/watch?v=13HSDn3ub58&t=41s>
https://youtube.com/shorts/6Yp_-C1G8IA?feature=share
<https://youtube.com/shorts/ln2DqBYZ6ig?feature=share>

Main project choices:

During the making of the escape room I was challenged by the amount of limitations that came with working in an AR filter. I could use the phone screen only, max 4mb and it had to actually work which made me learn a lot about conceptualization and realization to finish a project.

For this I want to go through a few examples of choices I went through.

Puzzles:

For the puzzles I wanted to have multiple puzzles that were different from each other but also they had to be a challenge for the users but not too hard.

With this I came up with a code lock which was the main task of you to find out. Through the escape room there were numbers hidden. One was easily spotted as a hint and for the others you actually had to work. This made a challenging experience but not boring.

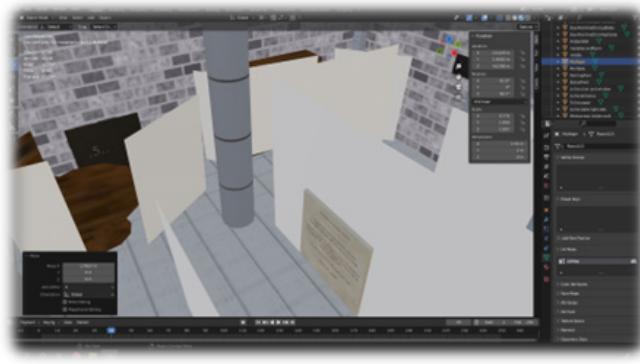
Also I made a hidden room where you had to find a key for.



Movement and level system:

Making the movement is one of if not the hardest part of the project to make. In the beginning the player had the freedom to move wherever they want to but the models didn't have any collision detection and would be hard to create in Spark AR. So I started working on planes where the player could click on during the experience but this as well would be hard to implement which led me to create two buttons that would make you cycle through the rooms. This system was very easy and still gave a lot of freedom to explore.

The level system was one of my last things to implement. An escape room can be really challenging but also be very easy in real life. Rooms are made on levels. I wanted my escape room to have multiple difficulties which gave my project access to beginners to more experienced players of escape rooms.



Design elements:

Outside of mechanics there is one part which made the escape room as it is.

The design.

In my escape room I are a lot of scary elements which makes the escape room as scary as it is. In real life people are put into these tense experiences which make people want to escape more then ever. This did I make with some components.

First of all the typography.

I went with the chiller font that felt threatening and also kinda scary so people knew something was off.

Then there was the timer, you don't want to know what happens when it hits the 0 (spoiler: Just a game over screen).

Other elements where the room that suddenly went dark and a scary laugh that could happen when you go through the room. Is it the statue?

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