

3D Environment

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Critical evaluation - the successes and limitations of the piece, any what you have learnt by undertaking this project (250 words)

The idea

The main goal behind my 3D model was that I wanted to try and design something that would be challenging for me. Although this is my first-time using Blender, I wanted to see what I could do and the overall outcome and skills I would have gained. I also feel that my passion for art made me intrigued to see how much I could learn through using Blender.

I felt that creating a house with a nature inspired environment would be a good starting point on something that wouldn't be the easiest however I could gain a lot from it. There were many different house options I was looking at however came across a modern looking house in bath which inspired me a lot to look further into the design behind them.

My research

Mood board

Firstly, I organised a mood board with a collection of different houses I wanted to base design of. This is because I believe that making a mood board is a crucial step before developing any 3D model as it serves as a visual guide that you can use for reference when making any project. By compiling the images, it can help and support me when establishing a consistent theme while maintaining a clear vision through the 3D modelling process – to ensure that my final design will stay aligned with the initial concept. As we can see, all of these houses stick to a similar modern like theme.



Mood board



Sketches

Once finishing the mood board, I began to sketch the idea of what I wanted my house to overall look like. I think that making multiple sketches is better than just one because you're



able to have good idea of how the house would appear from multiple angles giving you a better thought on the outcome of the model.

I think that sketches are very useful as generally they can help you visualise your ideas and concepts in a quick and efficient way. I don't think sketches need to be very detailed but the more detail you put in, the better you may find your model looking. I believe that sketches can improve on your creativity and problem-solving skills as well as it's something that's useful to practice such as if you wanted to go into a job that requires lots of design as sketches can be viewed as an art form as well.

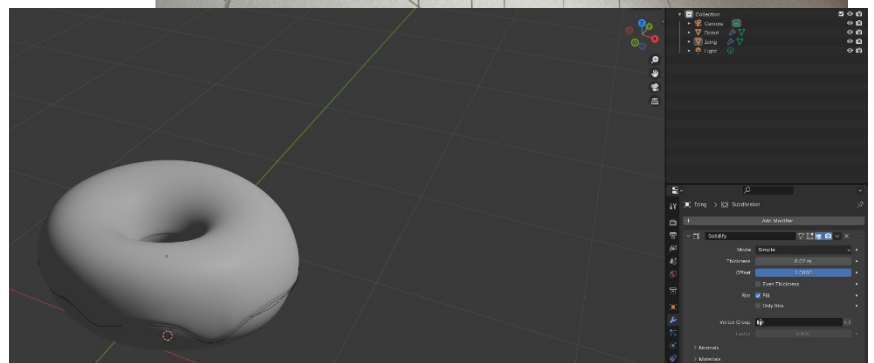
I think it's useful to experiment as well in the concept designs and see what works best for you. I think for someone like me who has no experience in 3D modelling, I didn't want to make my design too complicated so certain parts of the sketch I didn't use in the end such as any piping on the outside of the house.

We can see that I've decided to make a sketch of the front so I'm able to get an idea of the definition.

Learning Blender

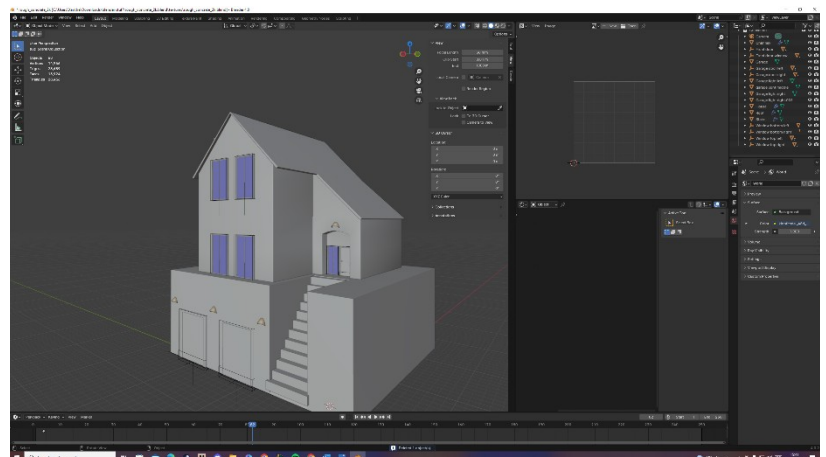
I found that learning blender through many tutorials helped me understand features such as; edit mode, sculpting and adding textures. For example, I was able to follow some tutorials for sculpting a doughnut as shown here.

I found that the sculpting was beneficial as I felt I was able to understand creating the house and the environment around while learning techniques like smoothing and adding texture to the model. This was then used to create land around my house and making the fundamentals of the building such as the walls, indents at the door and roofing.



The process

I found that starting with a simple cube then multiplying it out until I got my rough shape was simple as the house itself from birds' eye view appears in a L sort of shape. Once done with that I used a distortion tool that moved a rectangle on the top into a triangular shape to create the roof. Using edit mode, I found



useful as you were able to select certain points of a shape and edit them or use a tool that allows you to have extra points added on which is what I did to make indentations to the house, specifically the door side. By adding extra edges to the door, I was able to select the parts I wanted and push them back to create this indent into the house for the door and window to fit nicely into.

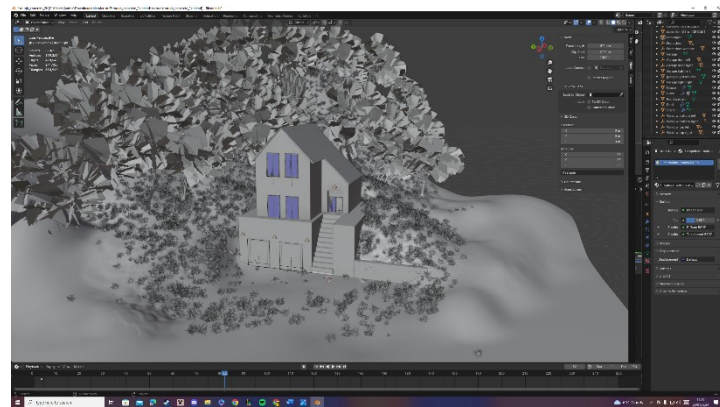
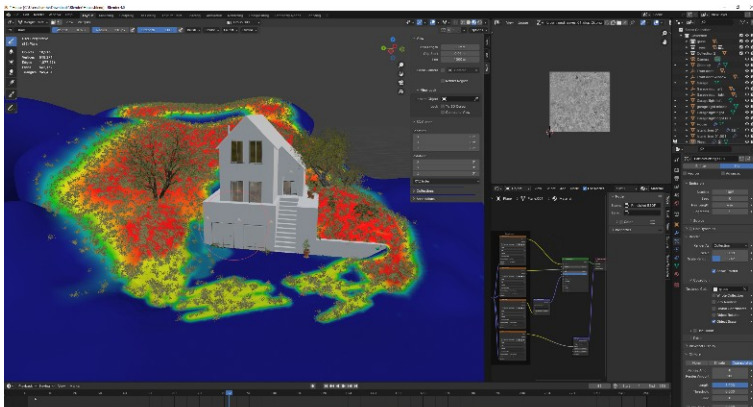


Once the fundamentals were done. I began to work more on the environment around the house. I found that using different tools on the sculpting section were practical when it came to making the hills behind. I found that making hills behind were a good way to make it appear like there's not just void behind the house and then on top of that I imported a HDRI to be my background and reflection. We can see that the subtle clouds in the background added lots of detail.

When it came to creating all of the trees and grass, I found that importing them online from a site

called PolyHaven was really useful and once I had pasted the objects into my blender file, I began to create multiple sets through making them children, which allows you to multiply the grass and other objects into certain areas that can be changed using weight. The weight edit allows you to put different colours depending on where you want more or less of a group. I also imported other assets such as dandelions, flowers, rocks, and plant pots.

When finally rendered with all the textured added, I think that the outcome was a lot better than expected.



The outcome

As someone who had never ventured into the development of 3D modelling, I found this a very interesting and fun experience. From an outside perspective,



Blender as a whole appears a lot more confusing than you learn to realise, with lots of input from classmates telling me what looks better than other options and watching tutorials, I was able to push myself on this project a lot more than I thought.

Looking back now I wish I had added more depth and structure to the building although, I believe that it still looks good. Something I Wish I had done was made it so that the roof tiles were actual objects rather than a texture as the appears rushed in some ways, similar to the stairs. But I think that the environment and the model of the house is very good for my first try.

As seen through the different photos, we can see different processes, what made it to the final model from the sketches and the different changes I went through. An example was that I was going to have a lot more grass and a bit of mud around the front of the house to bring more nature into it. However, many classmates said that it looks like there's too much grass therefore, I added a driveway and some extra details such as the flowers, rocks and dandelions. I think this also added more colour to the result.

