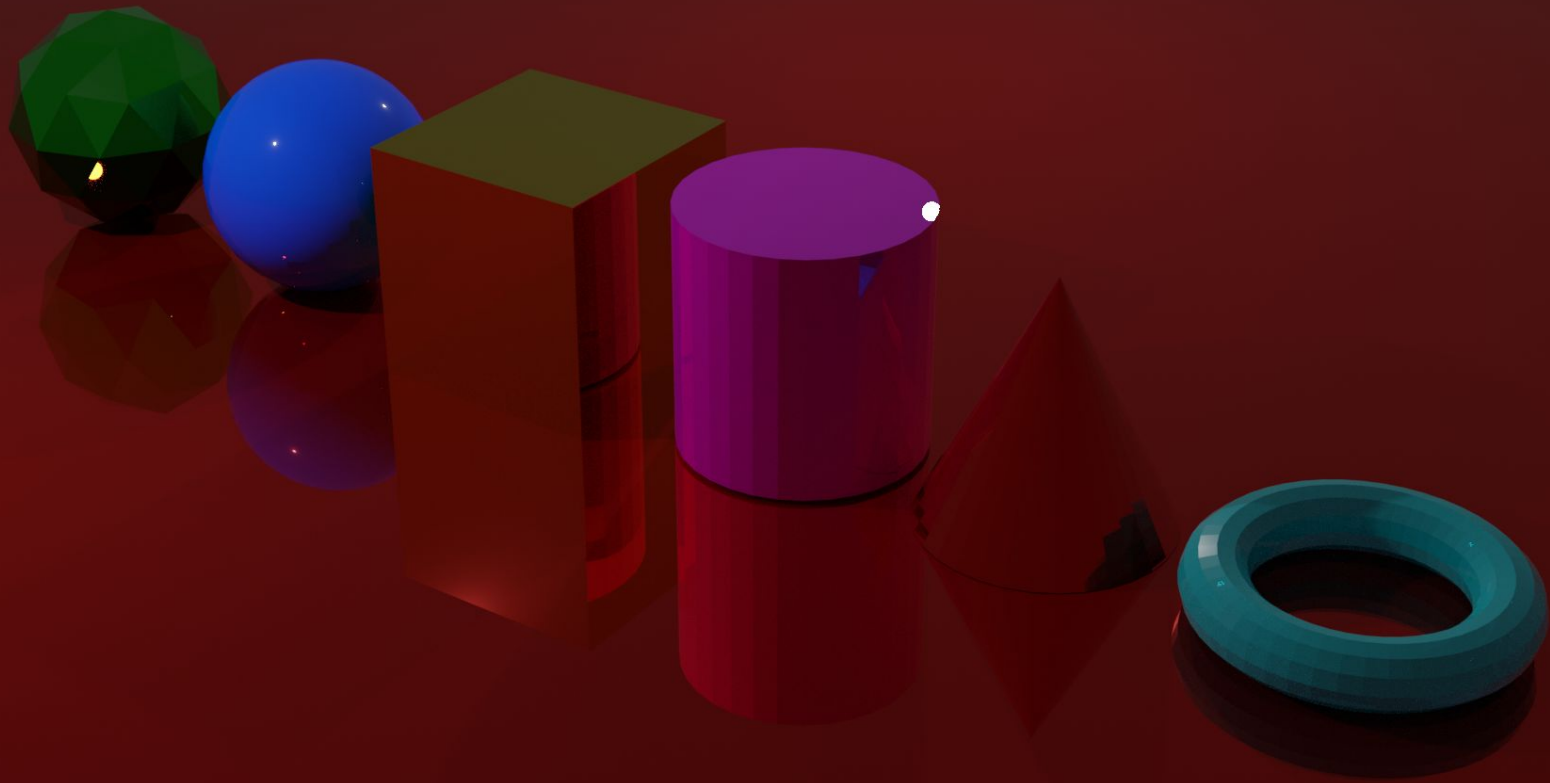


Challenges.

Grade 12 Media Week 2 Projects:

Joshua Watson

*Check the speaker notes for explanations



Speaker Note 1

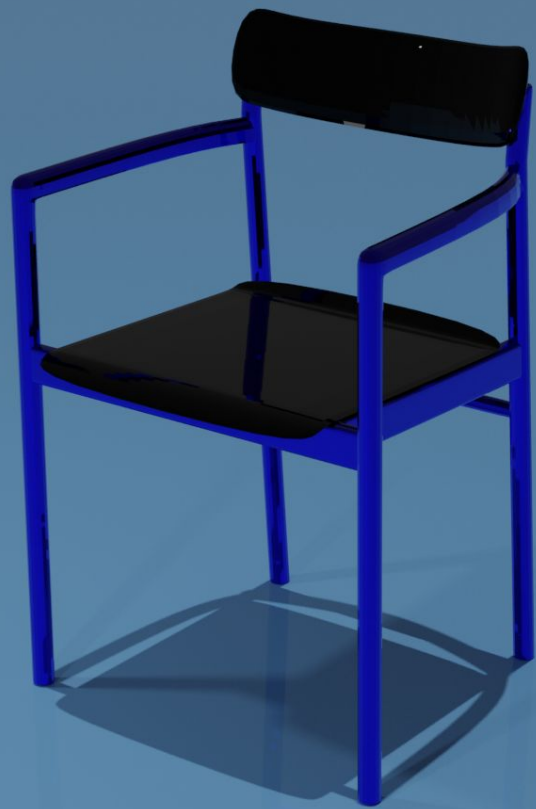
I spent this week of at-home learning exploring all the ins and outs of Blender. Prior to this week, I had very minimal experience with Blender, only modelling one simple project months ago. To begin my conquest of Blender I had to first familiarize myself with the program. To do this I watched a ton of tutorials and started off with something basic, creating objects and rendering them. I familiarized myself with the interface, learned how to create objects, move objects, scale objects, colour and texture objects and render objects. The skills required for this were simple and it was a good introduction to the software.

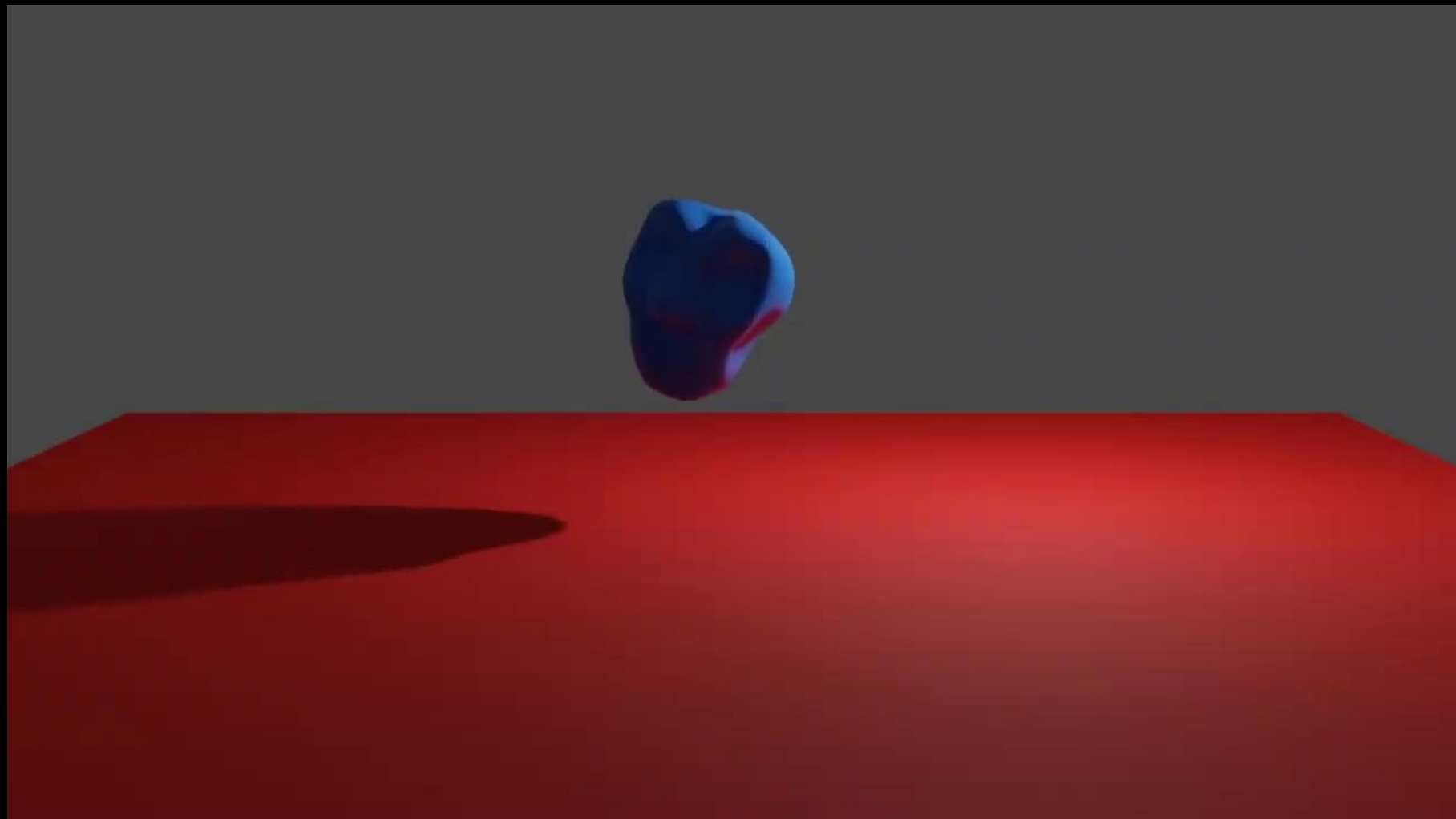


Speaker Note 2

Next I wanted to take on something a little more ambitious, making a chair. My process in making the chair goes as follows: I first found online reference images of the chair I wanted to make and imported those reference images into Blender to ensure my proportions were accurate. I then created a cube which I stretched to be the first leg of the chair. I extruded that leg to meet a back leg I also formed, accounting for the curve of its arm. I then applied a subdivision modifier to round and smoothen it all. I duplicated the one side of the chair and then built up the supports in the middle to meet them. I ended the modelling by making the seat of the chair and curving / stretching it appropriately. To texture the chair I had to simulate the pattern wood makes using Blender's various texturing tools. I lastly applied some other texture details and rendered the project.

By making this chair I was able to utilize and expand upon the techniques I learned in making the objects to create something more complete. In the end my modelled chair is nearly identical to the one I was referencing from.





Speaker Note 3

This one might need some explaining... After figuring out how Blender works and trying my hand at its 3D modelling components, I wanted to explore its sculpting capabilities. The funny, lumpy, vaguely head shaped rock that first falls to the ground is the product of my modelling experimentation. I took a sphere and tested many of the sculpting tools found in Blender to see how I could warp and twist it into something new.



Speaker Note 4

Here's another example of some of my physics experimentation. I again took my sculpted object and dropped a plane onto it, under the effects of cloth physics. It took me a while to understand how the cloth physics worked and I feel my best utilization and application of them are not here but in the next slide. This video again took 3 hours to render in the cycles rendering form. I am incredibly impressed with the wide variety of uses that Blender's software provides, ranging from modelling a chair to whatever this video is.



Speaker Note 5

Lastly, my final piece of project 2 was to create a small diorama, here pictured a baron bedroom scene. The most challenging component of this piece was creating the bed in the middle of the frame. I first made a mattress shaped object and put it on the floor. I then put a plane above it and applied more realistic cloth physics to it. Instead of using the cloth physics to repeatedly watch the sheet fall over the mattress, once the sheet had fallen in a way I liked, I applied the effect and made the blanket into a static object. To make the pillows, I needed to subdivide a rectangular prism and apply fabric effects to its edge. I next had to apply a force field to the object's centre to pull the pillow in both directions, stopping it when it had a sufficient amount of 'poof'. The other elements found in this scene were made by importing the chair I previously made, experimenting with light effects to make the lamp and putting a plane on the wall with image texturing to create the back to the future poster.

I really like how this turned out however I would consider putting in more detail into this scene and making the floors and walls a more visible colour although I do like the void effect and the slim amount of reflection that can be found on the ground.

Speaker Note 5 Continued

All in all, Blender is an incredible program boasting several uses of its software and exceptionally exceptional considering how free it is. Being able to work with this program at home made my at-home week much more useful and enjoyable than I was expecting it would be. I would highly recommend other students experiment with this software should they have the opportunity. Given its versatility, I could also see it being more intertwined within class projects. Possible projects I could see with Blender would be very similar to what I worked on this week. I think making objects is a great introduction to the software, the next step being to experiment with physics with the objects. I also think making a chair would be a great project for a student to try as it requires some creativity, problem solving, spatial thinking and extensive use of the software. There are also a ton of chairs out there with reference photos and blueprints. The logical next step after making a chair could then be to make a room, perhaps one's own bedroom or a different scene. More furniture could be made as well as whatever else somebody could think to try.

If I continue with Blender later in this course, I would love to try animating in it. I might take on one larger project as opposed to several smaller ones as I did here.