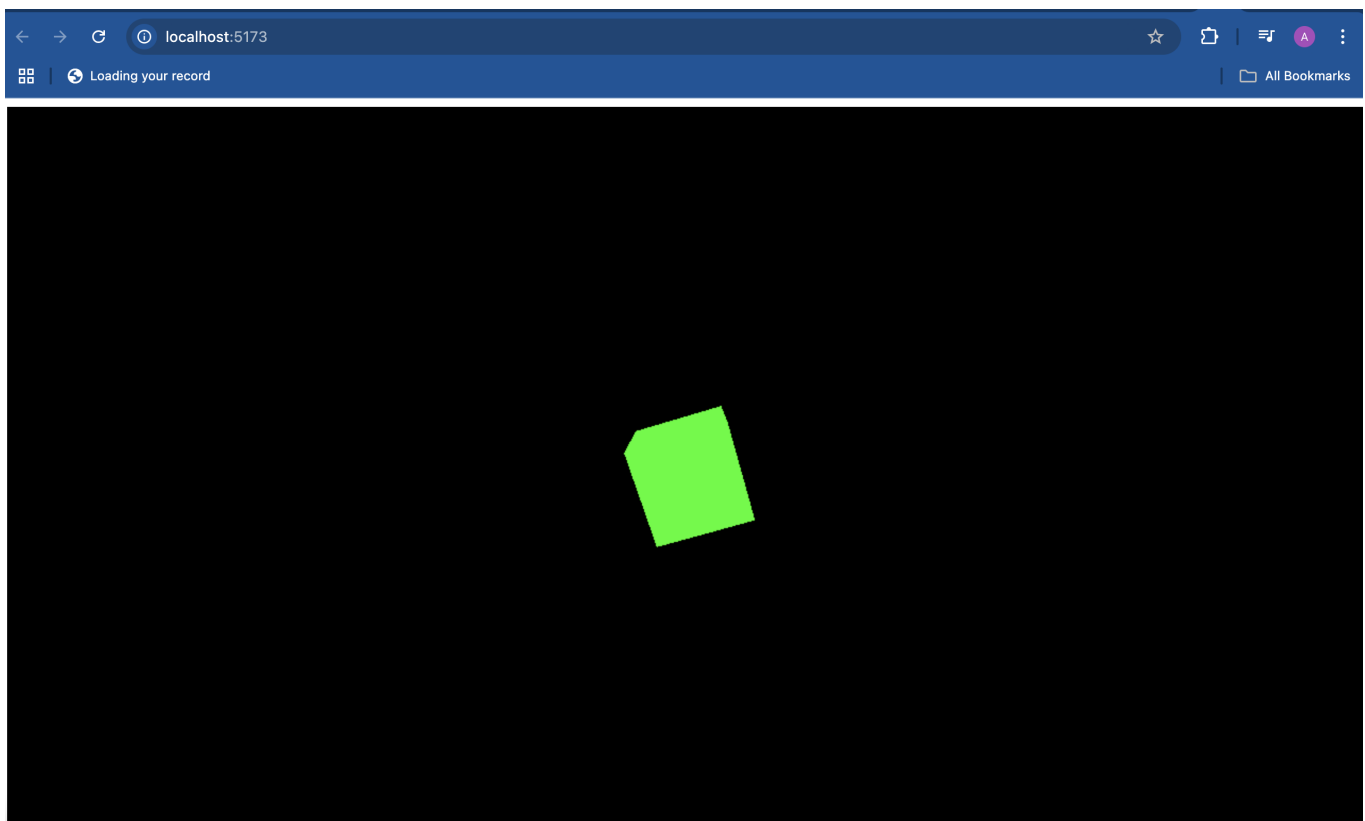


Three JS 3D World README

Intro: I will learn the fundamentals of shapes, lightning, positioning, ect., in three js.

First, to install three js and to get an idea of what the library does, I visited the official three js website. (three.js, n.d.)

There I have installed the files via nodejs & vite, and run my first project on three js that comes just right after the installation.



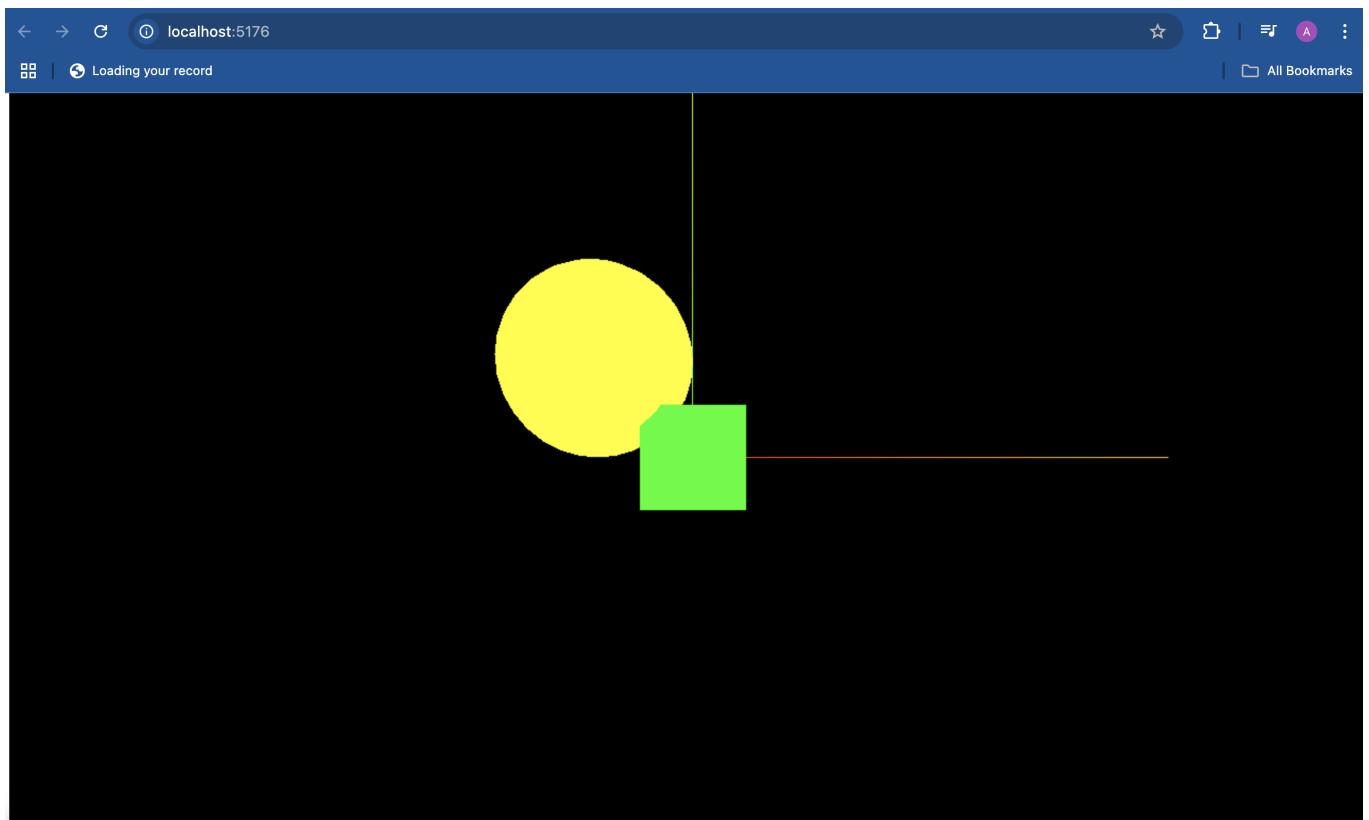
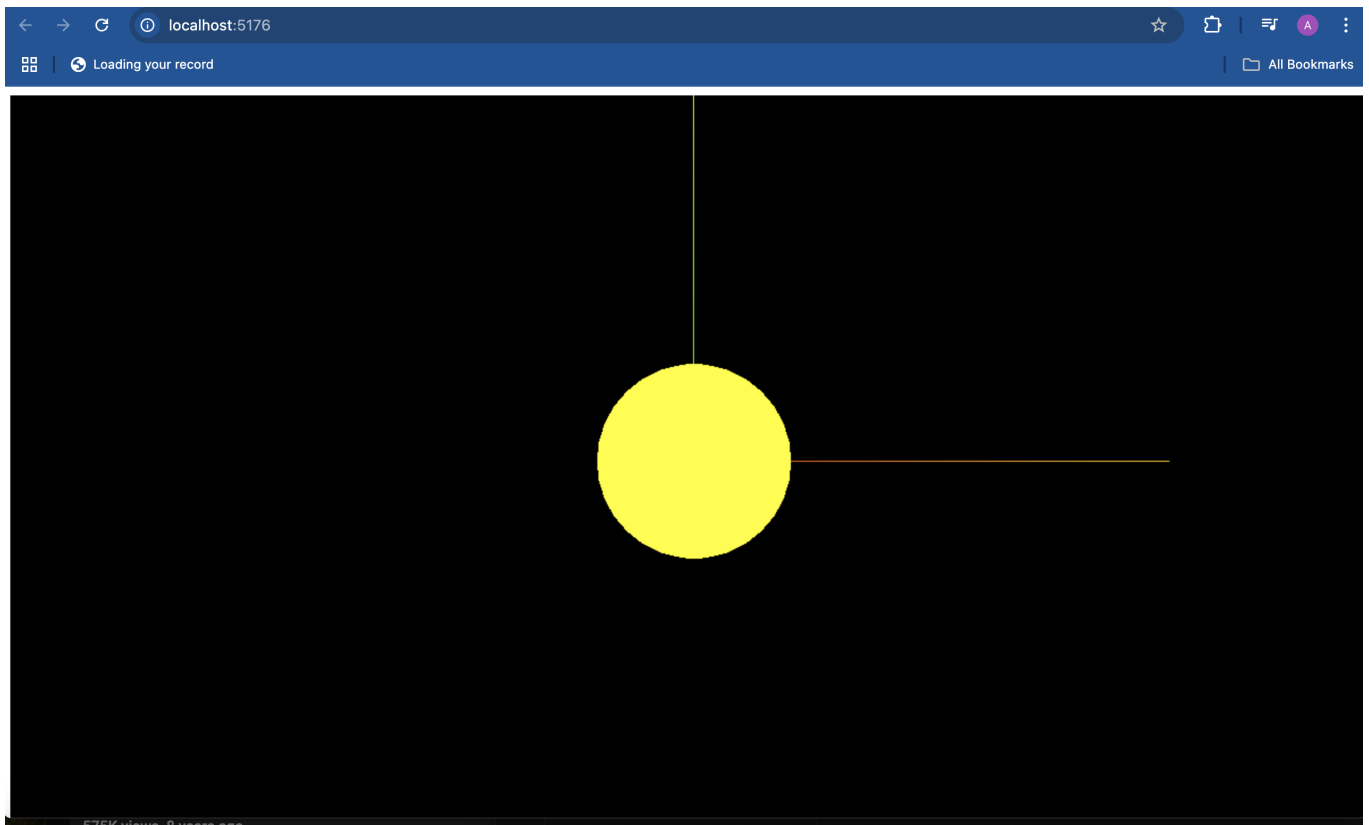
I then also watched the Fireship's tutorial video (Fireship, 2022) where I gathered basic information on how to set up the scene.

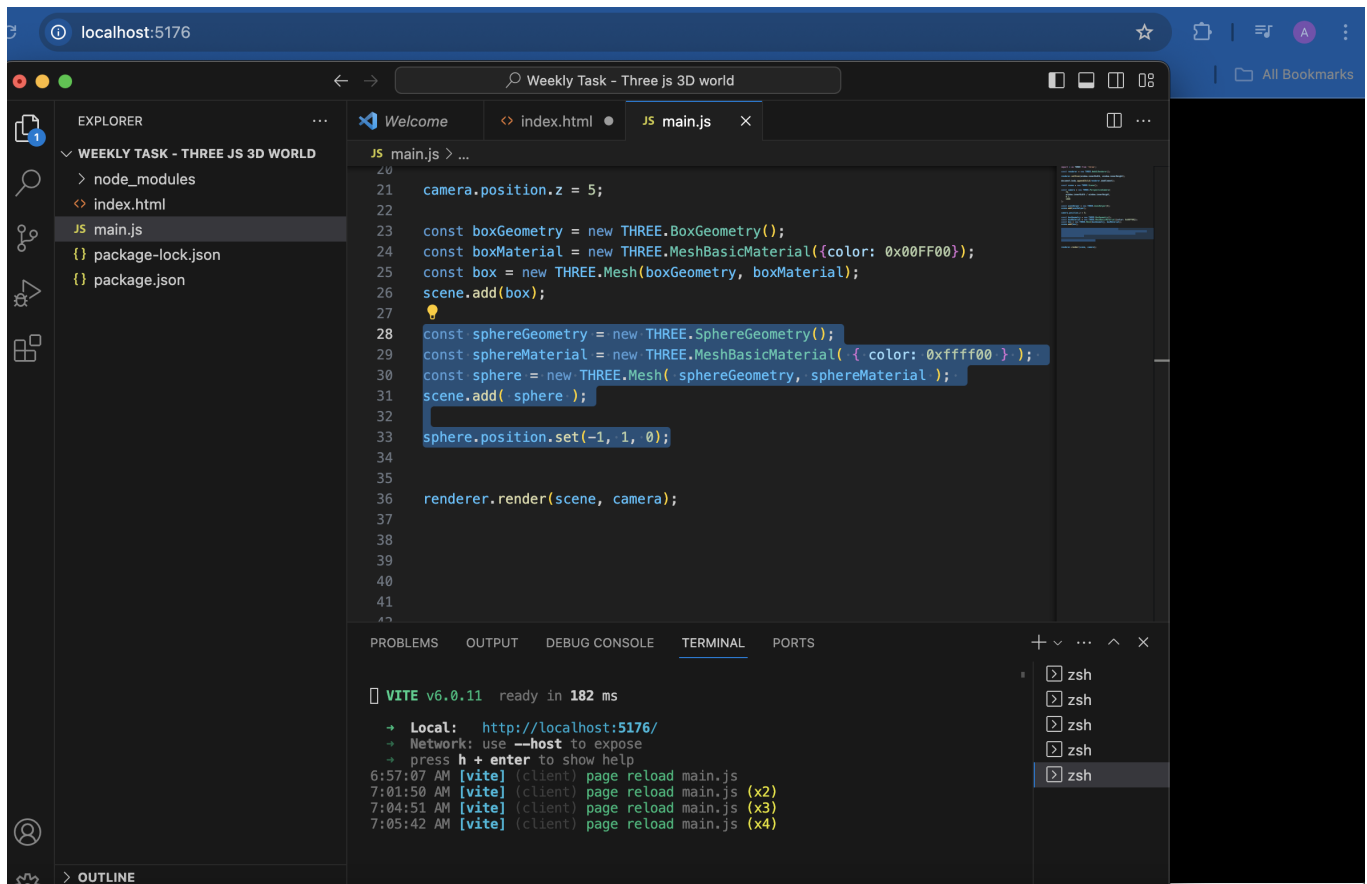
I found this video tutorial (Wael Yasmina) to be especially helpful when constructing my scene, because it is structured in a way that covers most basic configurations of setting up the scene

After I've set up the camera and basic render, I started working on my items a bit.

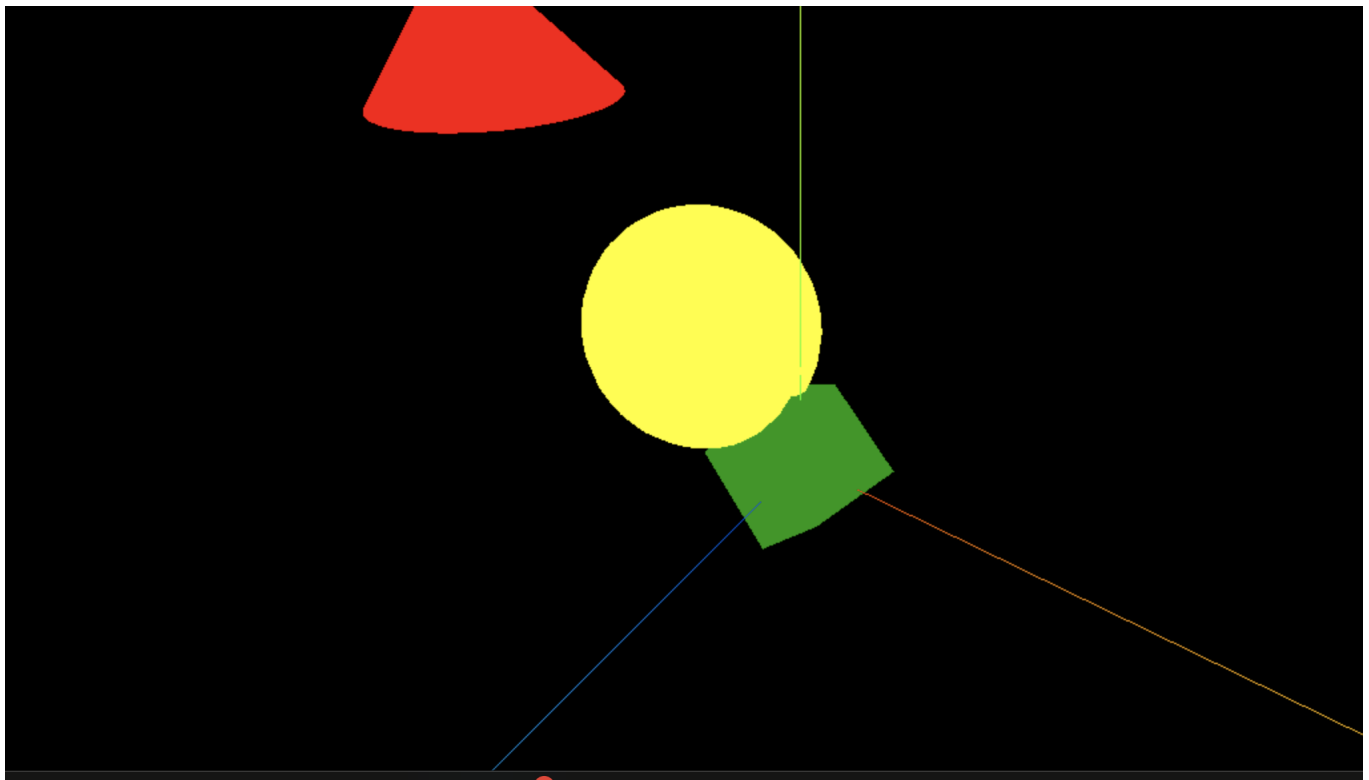
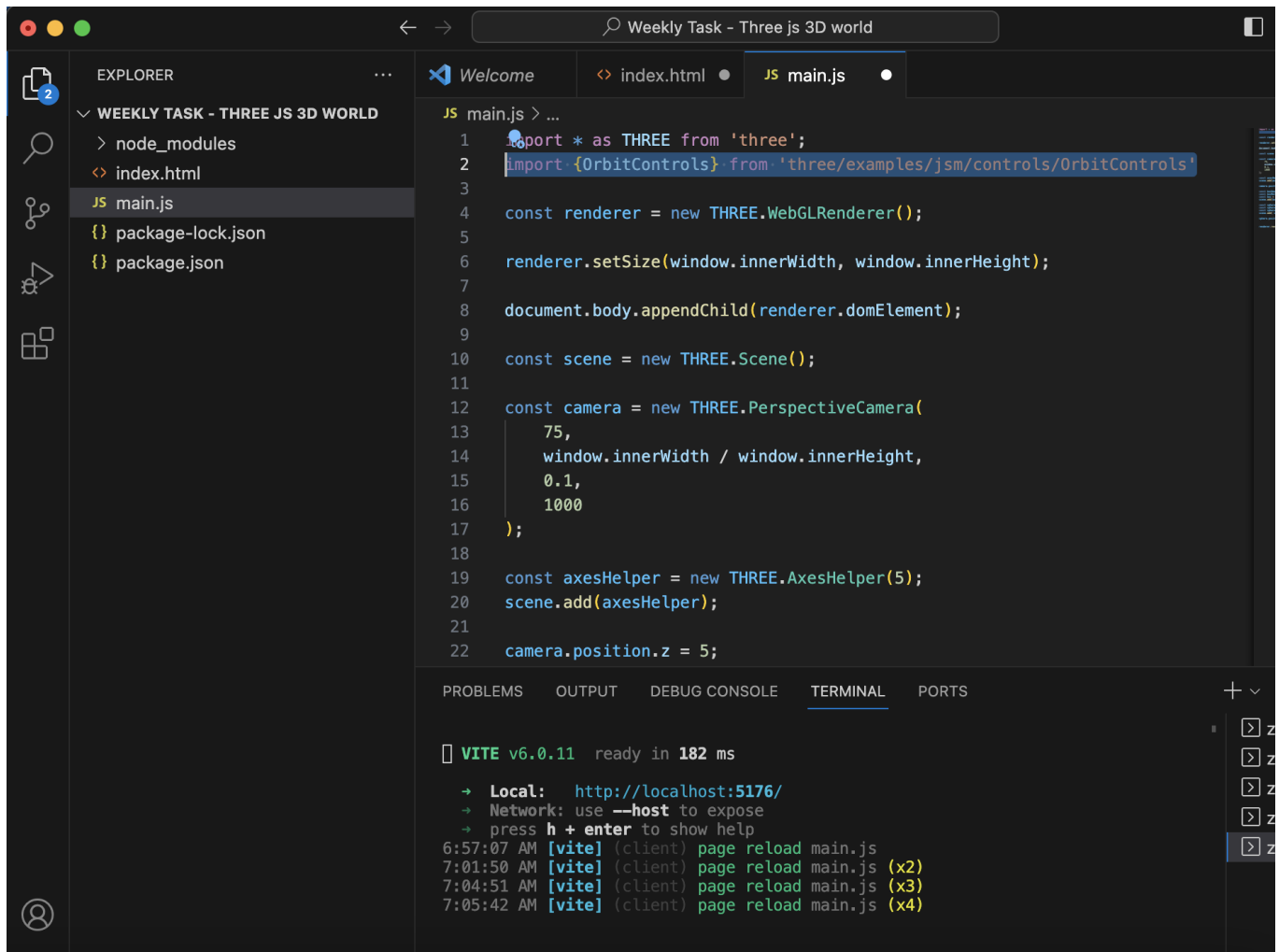
First, I populated some new shapes using pre-defined geometry rules and forms.

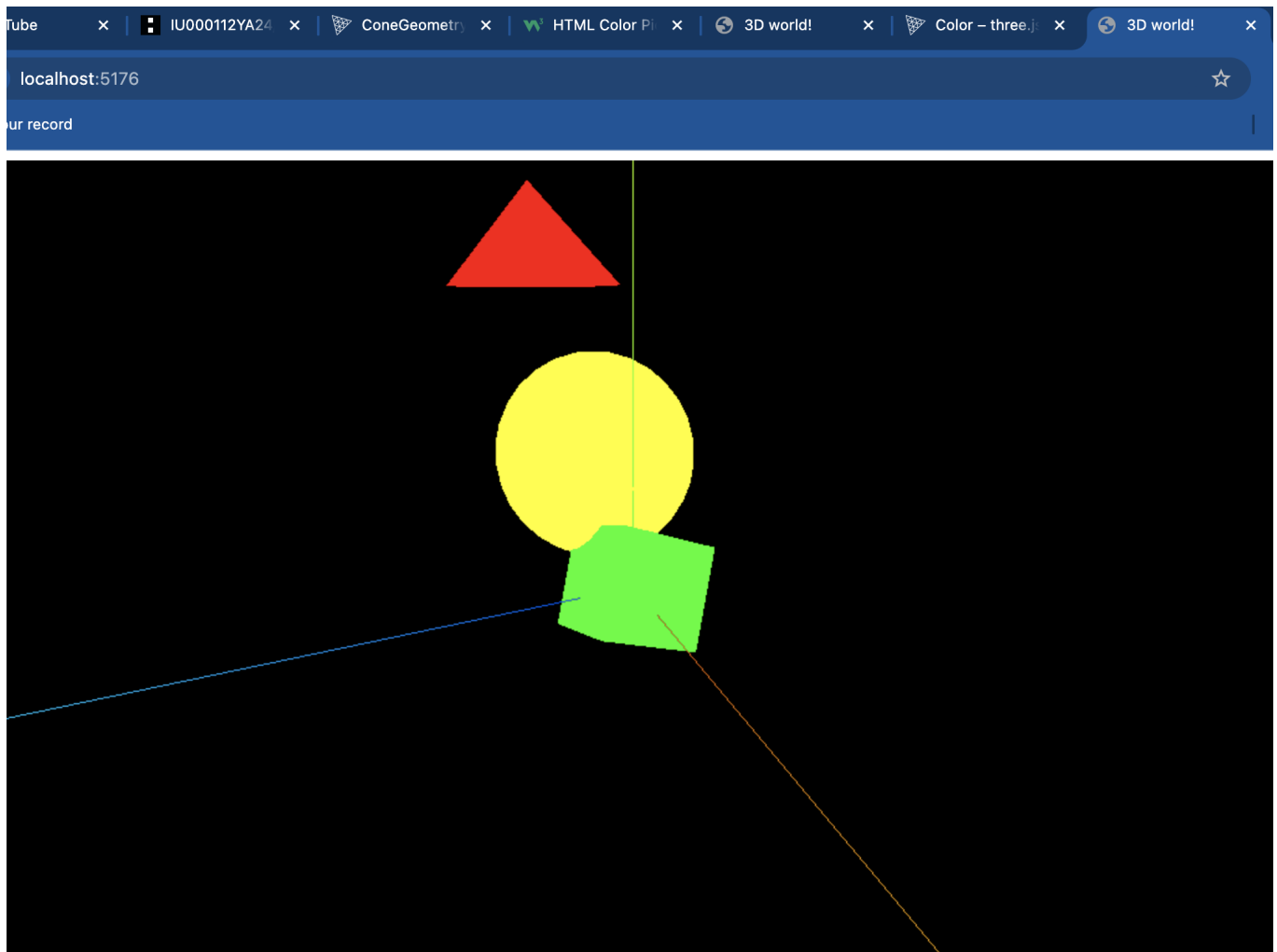
I have also experiemnted with coordinates and placing elements on different axis.



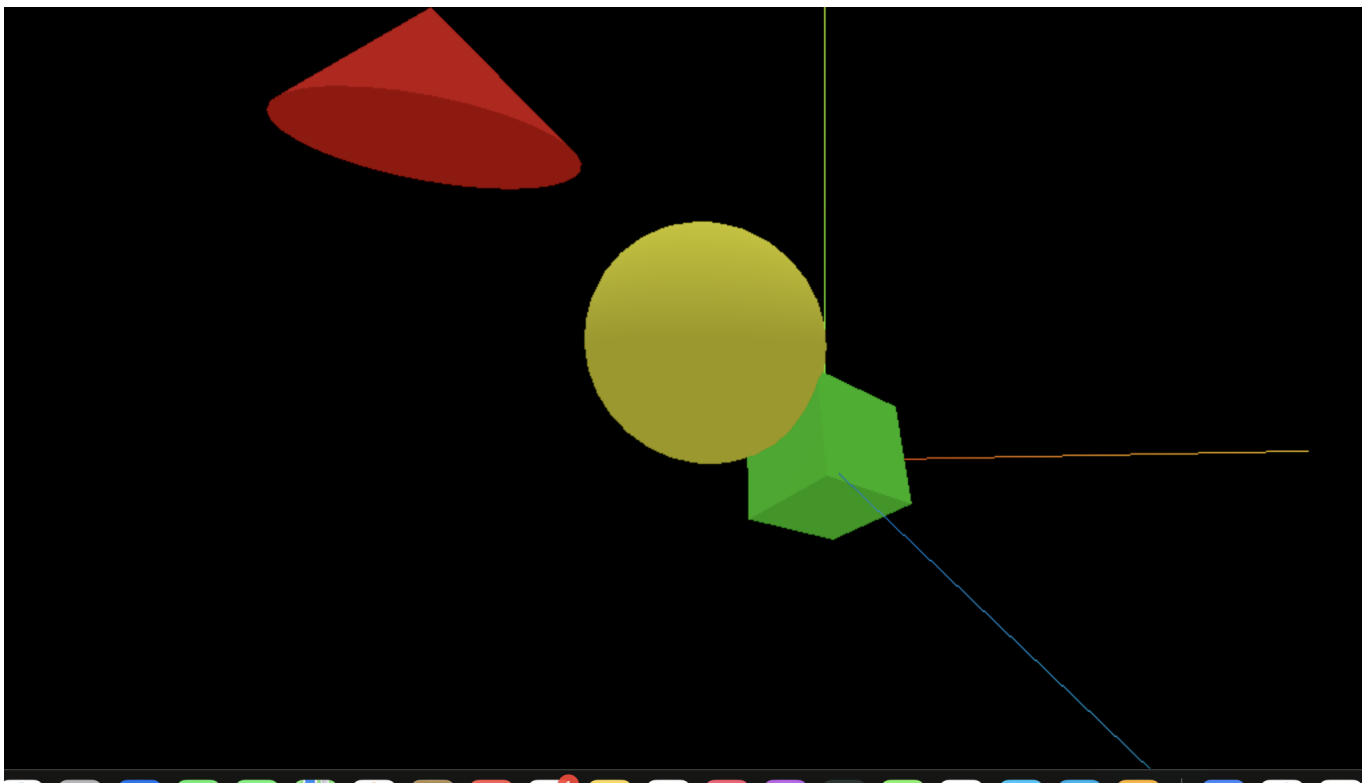
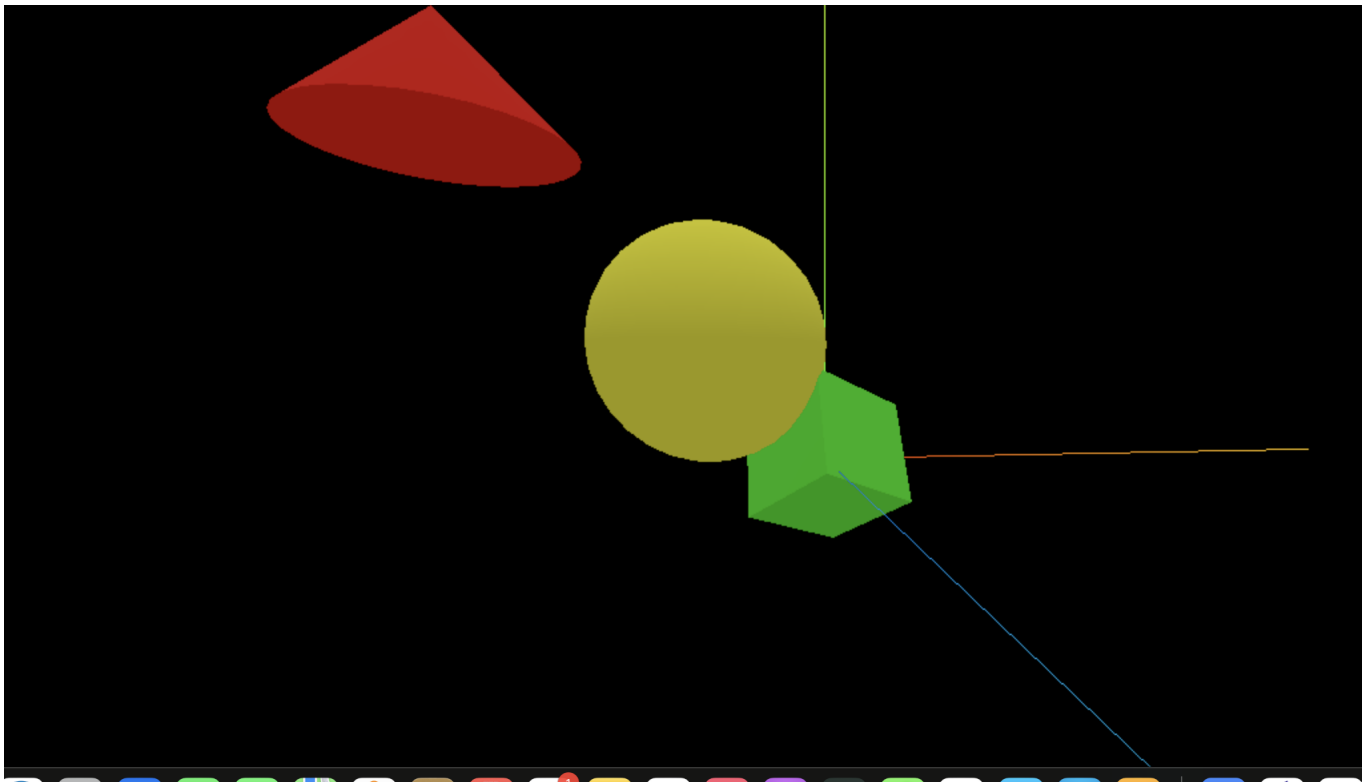


Then after that I decided to import Orbit Controls straight away to be able to change and position the camera





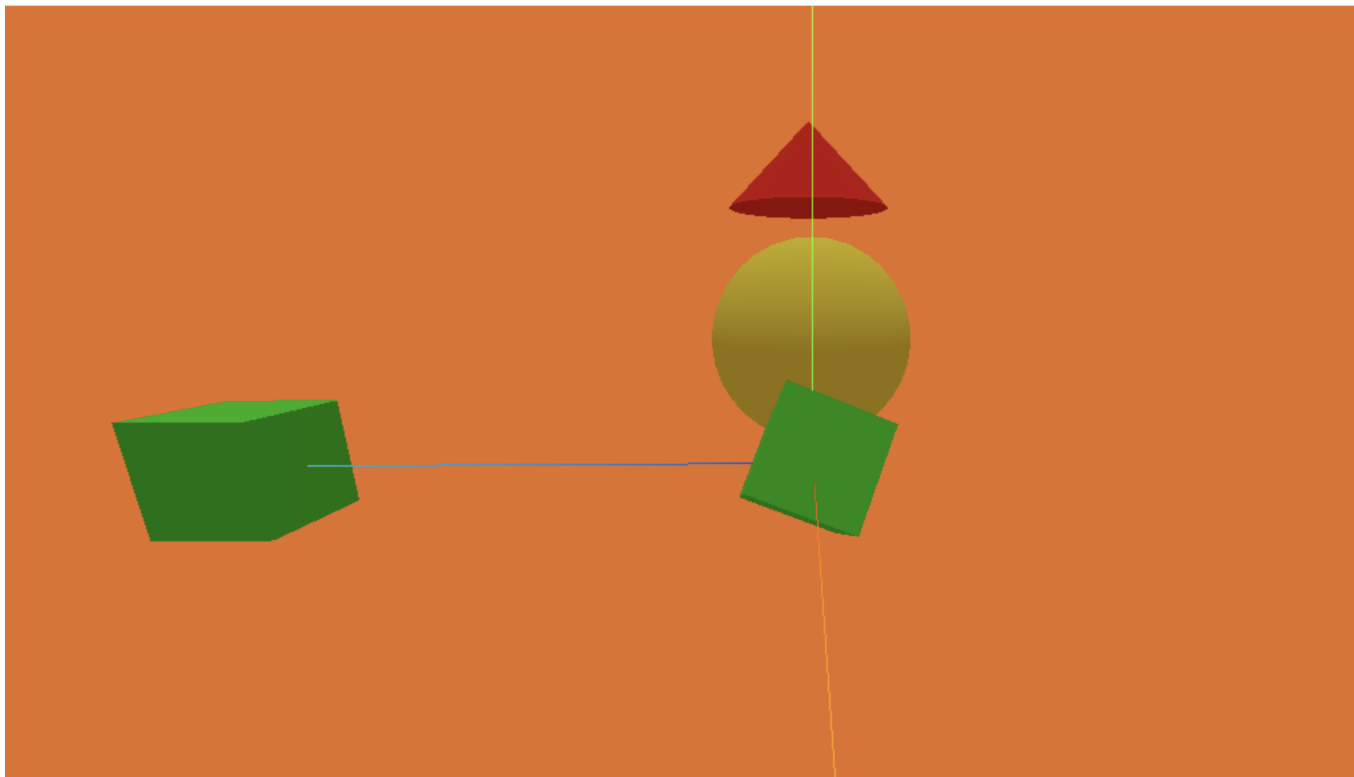
Then I added lights to make shapes a little more 3d and in relation to each other. I had to also swap the materials meshes to Standard instead of Base, which reflects light a little better. I have added ambient lights and set them to grayish colour.



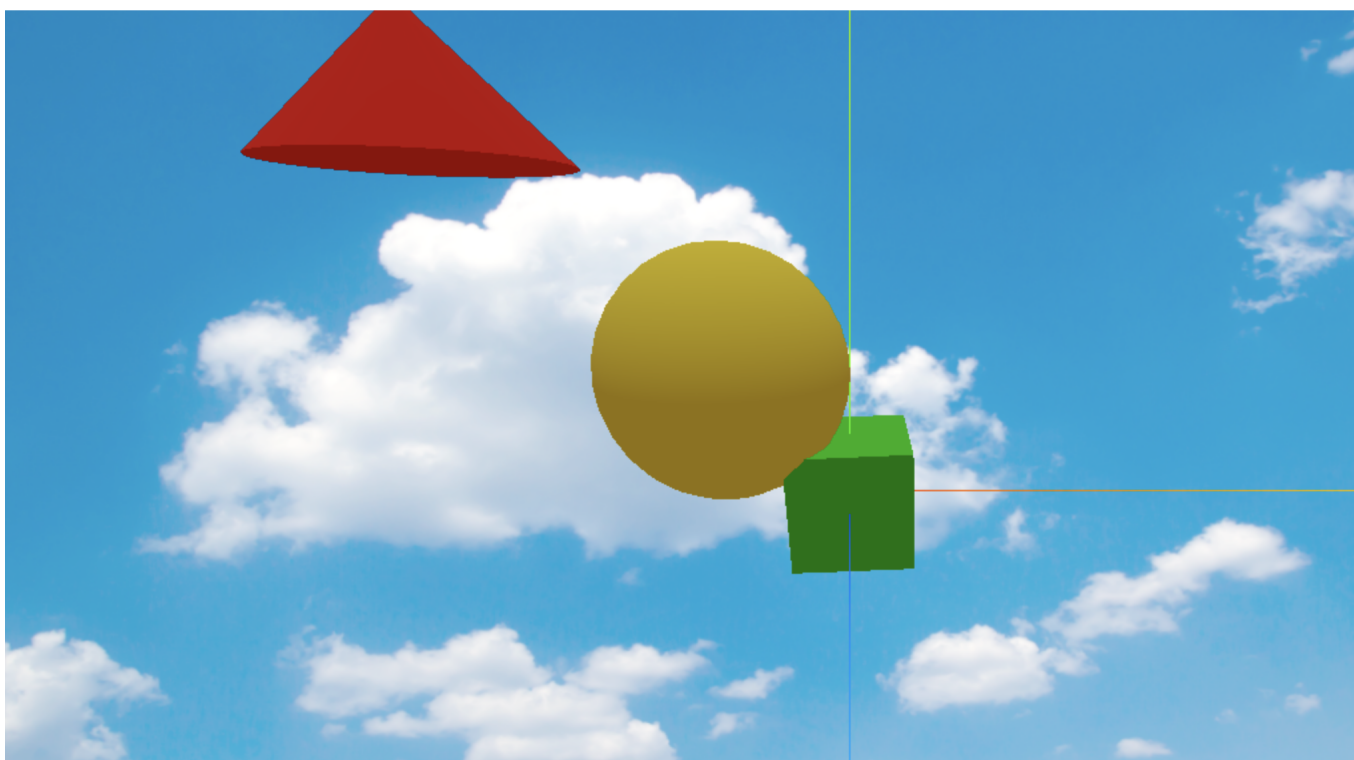
I also added direct light which was purely white, to give a bit of the highlights on top

I played with different colors a little and found some that I like.

I tried to change a background color:



And then used `loadTexture()` to load an image of a cloudy sky and set it as the background



Reference List:

1. **three.js (n.d.)** *three.js – JavaScript 3D Library Documentation*. Available at: <https://threejs.org/docs/> (Accessed: 1 February 2025)
2. **Fireship (2022)** *Three.js – The Journey to 3D JavaScript Mastery*, YouTube video, 16 May. Available at: <https://www.youtube.com/watch?v=Q7AOvWpIVHU> (Accessed: 1 February 2025)
3. Wael Yasmina 2021) *Three.js Tutorial For Absolute Beginners*, YouTube video, 3 November. Available at: https://www.youtube.com/watch?v=xJAfLdUgdc4&t=690s&ab_channel=WaelYasmina (Accessed: 1 February 2025)