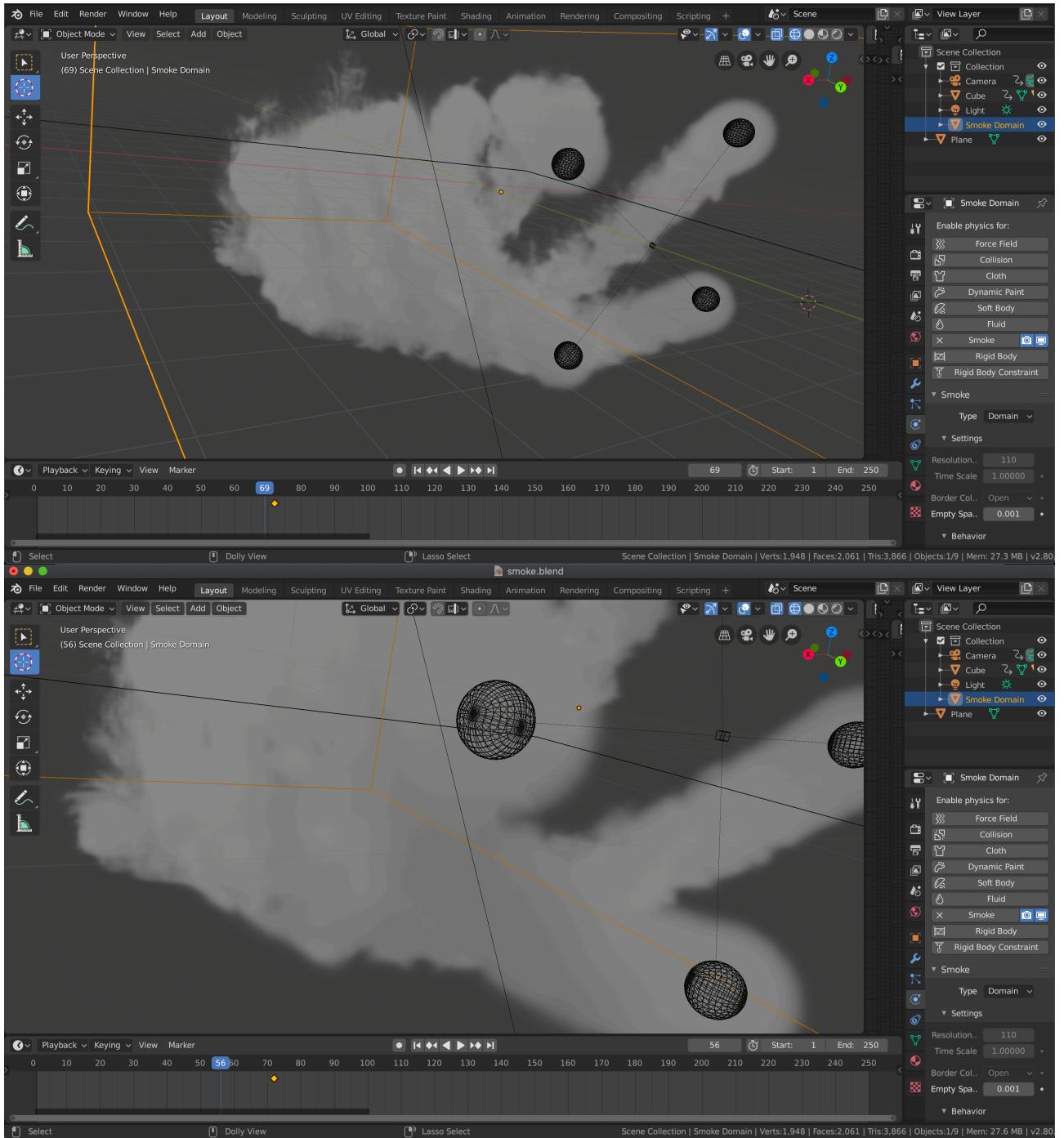


Blender project report: Smoke

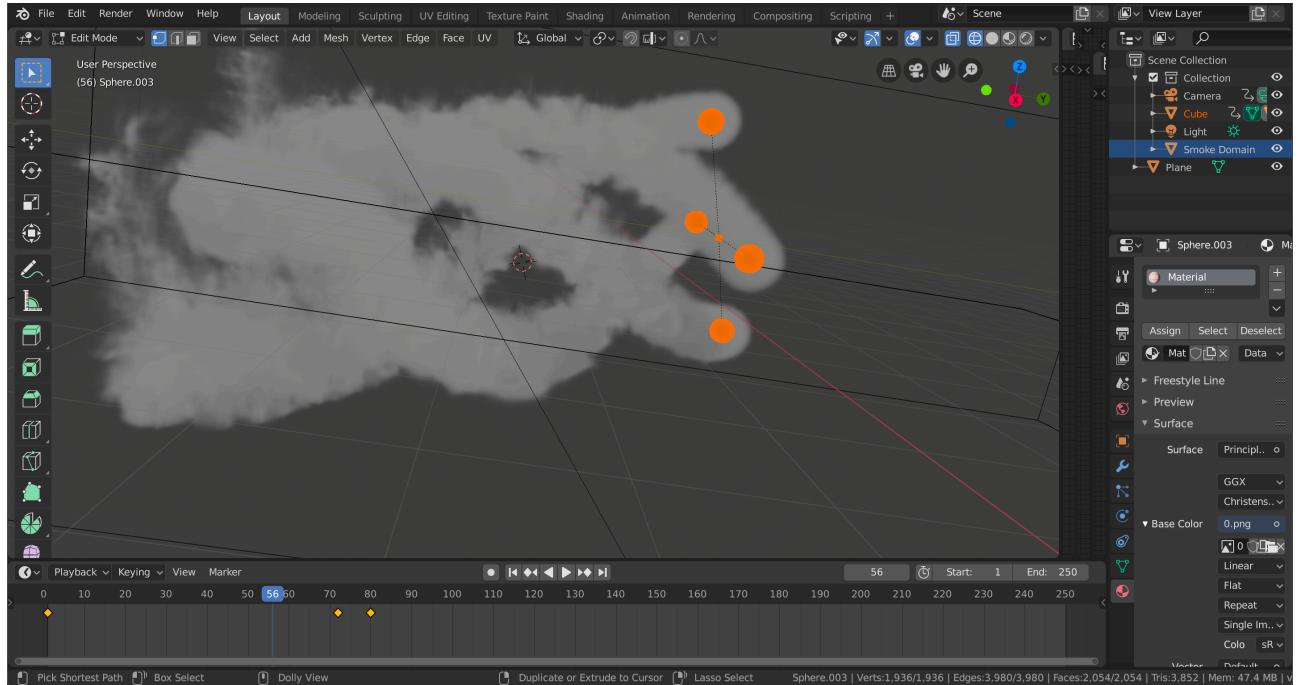


1.create your own 3D model (geometry model), show your model in wire framing

During the process of creating the modeling for smoke animation, I first create one UC sphere and shade the sphere with smooth skin. After that, I move the sphere along the x-axis to a certain point, then duplicate it 4 times and rotate each of them with different angles which are located as a cross. Then to combine all of them together with a centroid, I

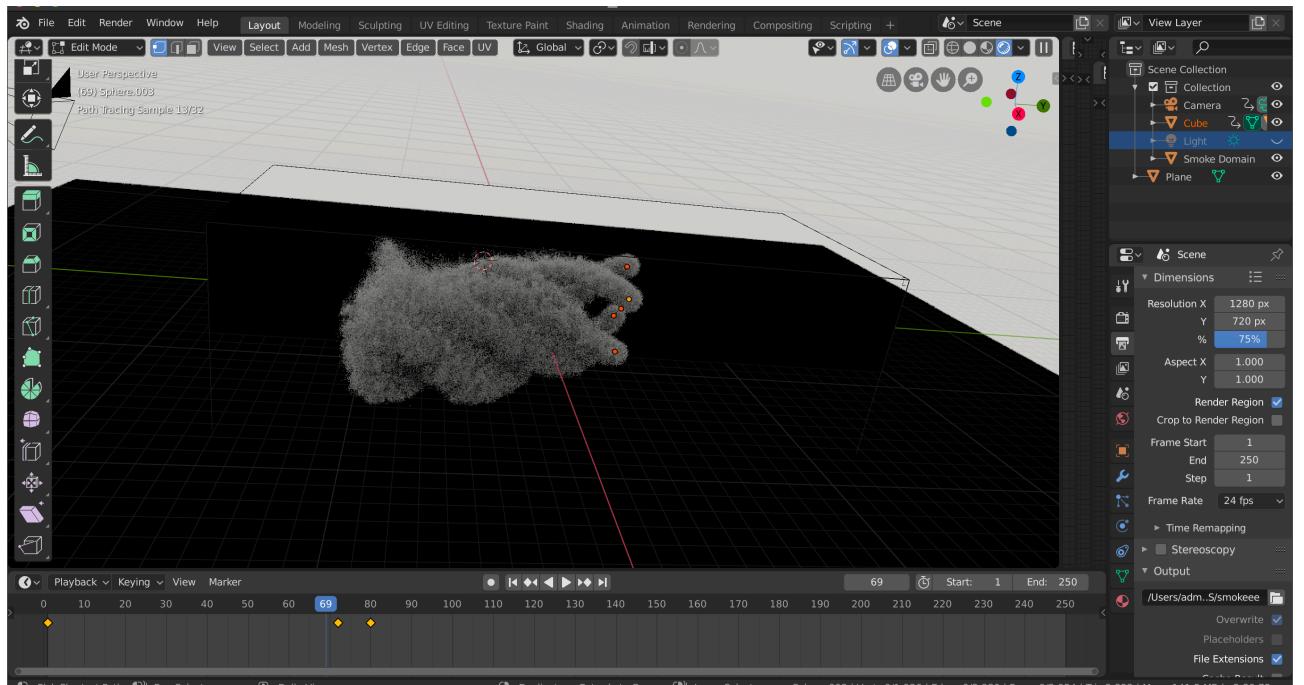
create a new cube and minimize the size of that cube as a point, and combine this cube with other four spheres together to build the basic model for the smoke animation. Then I add smoke effect in quick effect for each sphere.

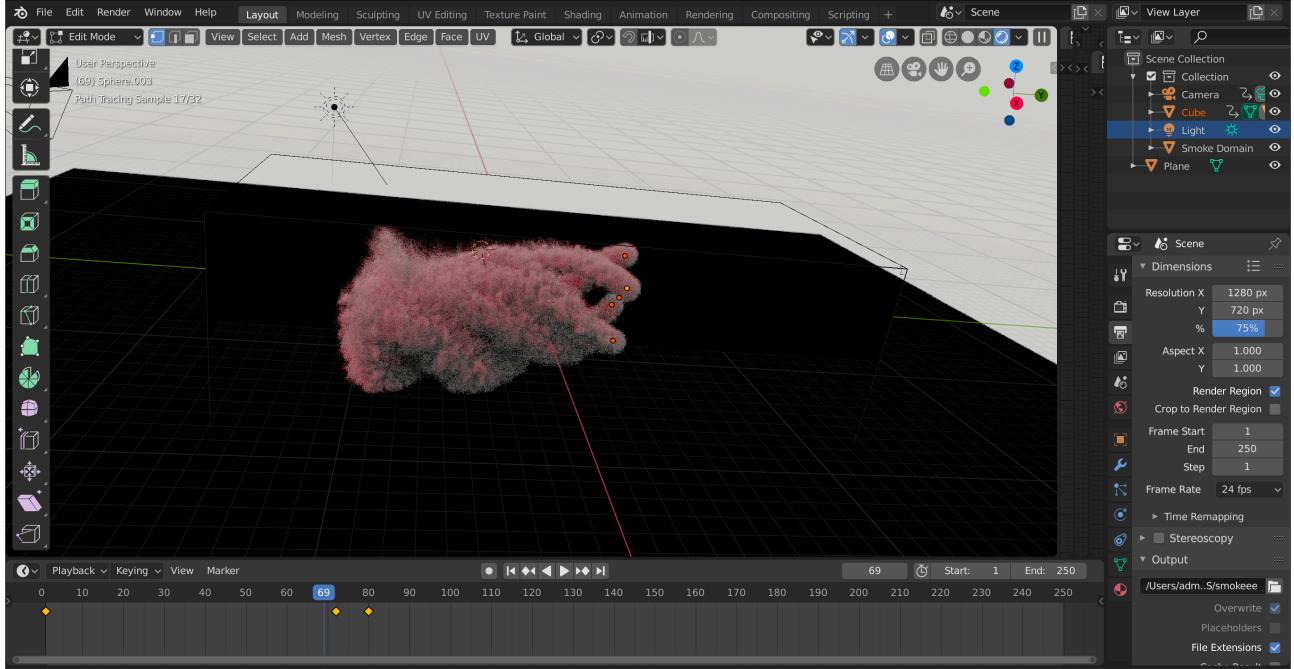
2.add texture to your 3D model, try to use image based texture mapping



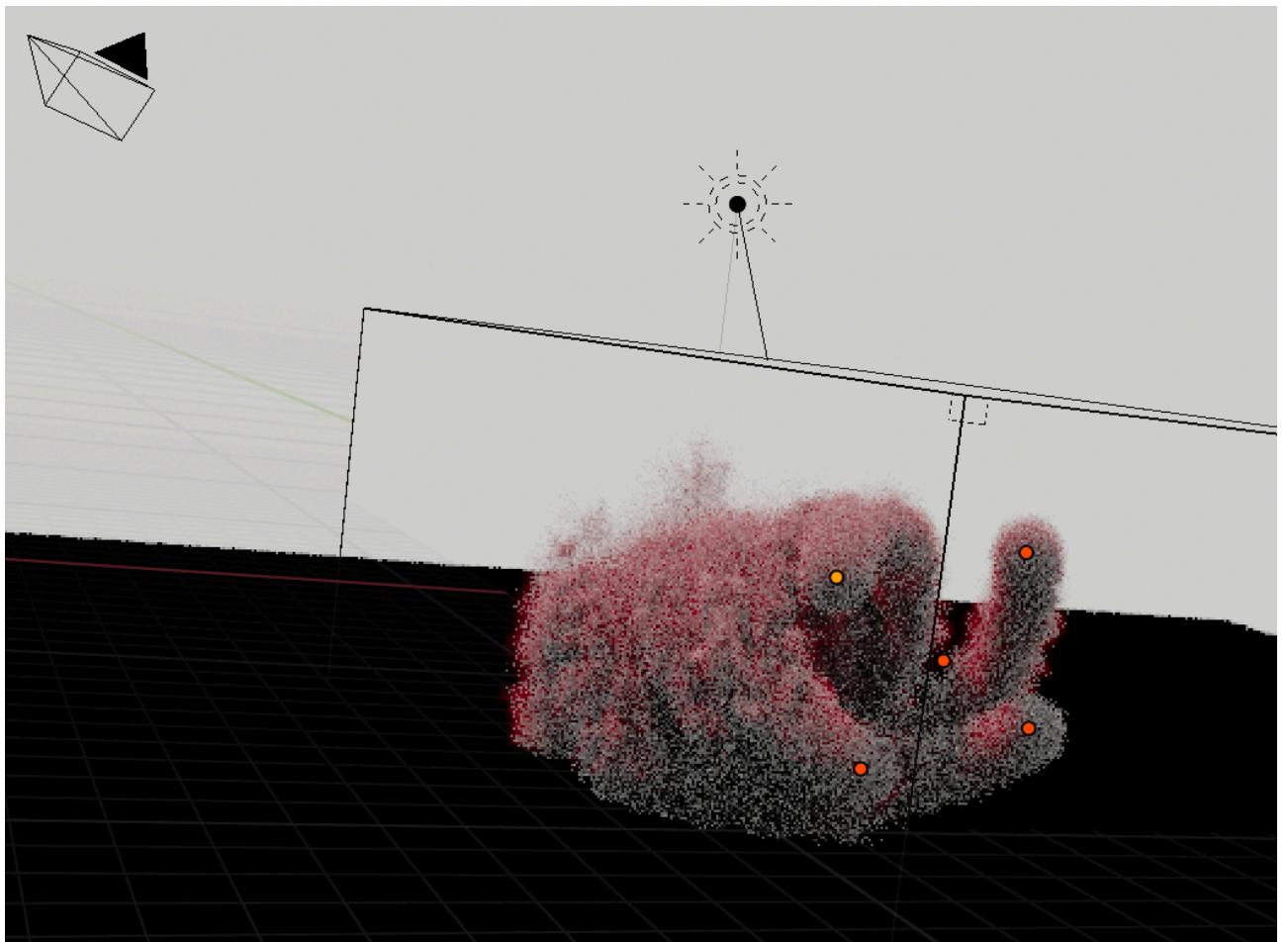
Then I select all full spheres together and add new texture sector in the texture paint section. In order to simulate the smoke animation more like the real situation, I used the fully transparent image that was saved first to import the skin into 4 spheres. The above is the result of my display under the wire frame.

3.add light to your scene

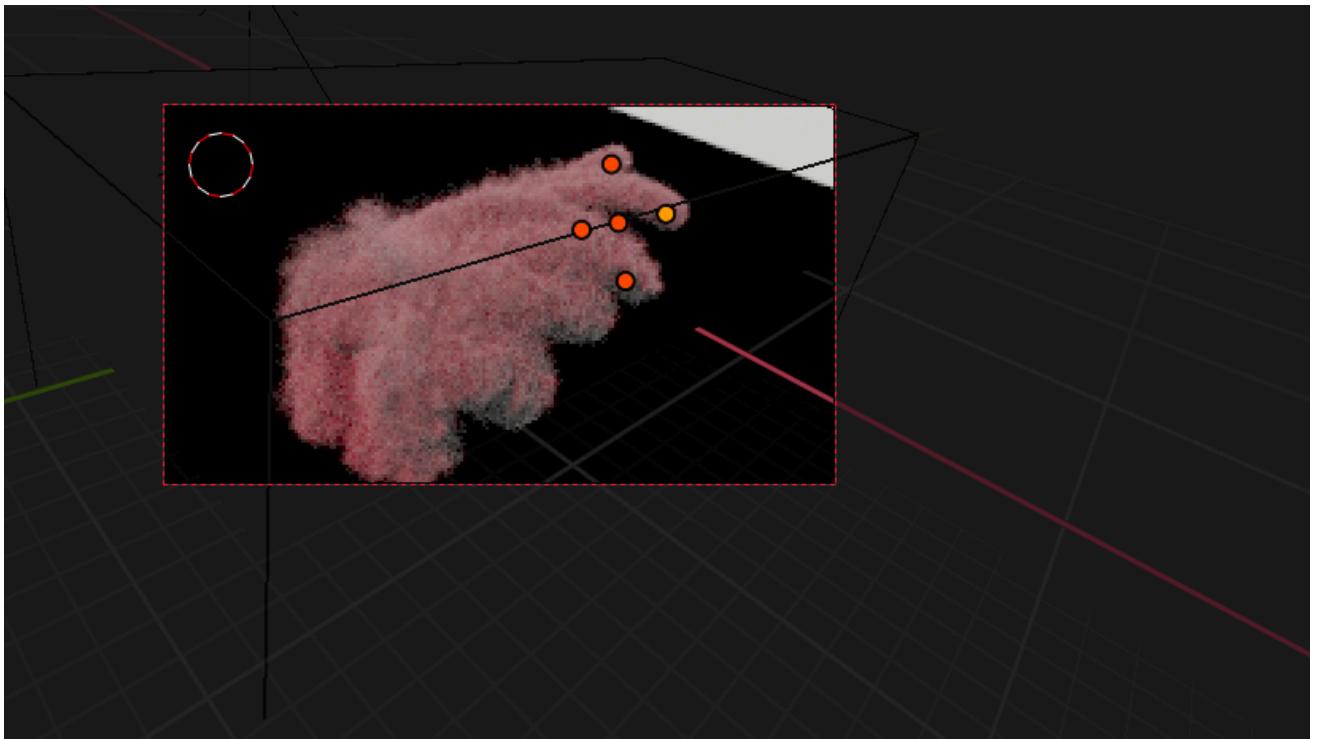




To change both the color and image of smoke shown from the camera, I set aa fixed light in the sun type to simulate the smoke in the reality. To emphasize the color o smoke, I change the color of light in to red, which shows above the the smoke with red light reflected from the sun. Figures above shows the different with a sun and without a sun.

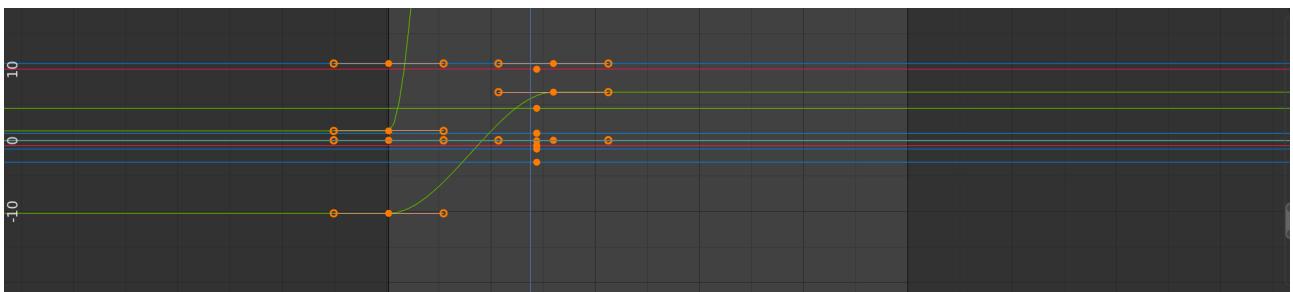


4.set camera for scene observation



After adding the light, I try to change the camera to help simulate the smoke in reality since we may have different and moving perspective when we are seeing the smoke in the reality. During the process of adapting the angle and making the animation of the camera, I use the fly cam trick in the navigation in the view section to help me find a better angle easily.

5.let your model move (e.g., if it is a person, let person run, if it is a object, let it deform), use key frames, create 3D animation



As making the animation of the smoking, I us the to key frame both at the starting point and the ending point, and in the ending point I both change the position of four spheres along the y-axis and add 540 degrees rotation centre on the small cube I created previously. The diagram above shows the animation node editor for each change in different transforms at different key frames.

6.use ray tracing to render your own 3D animation.

