## **Project Description**

youtube: <a href="https://youtu.be/5IDKksIQWQw">https://youtu.be/5IDKksIQWQw</a>

mimic: https://mimicproject.com/code/8d431e37-b2c8-dc27-dbb0-ecb31c60b3cc

Github: https://github.com/GZLDSSSs/BUBBLE

The name of this assignment is bubbles because the whole picture is made up of spheres which are lots of colorful bubble. I chose this theme because I was reminded of my childhood. I used to blow bubbles when I was a child and I loved watching them swirl in the sunlight even more. I believe that bubbles represent happiness, joy, freedom and vitality, so these bubbles represent my happy and energetic days, and seeing them reminds me of these happy times.

The colorful bubbles, spinning and emitting colors, made me feel like I was a child again. At the beginning I wanted to import some obj models from blender, such as succulents, jellyfish, rainbow ponies, games, gouache brushes, old buildings and other models that represented my life, but after many attempts and an afternoon of failed attempts, I didn't succeed in importing any of them, so I had to change my mind.

So in the end I was going to use bubbles to express my theme, which was easier for me than importing models, so I used what I had learned about three.js and made a sky box with bright colors, I added 22 spheres to the space because I am 22 this year and this represents my happy memories of each year, they are rich and lively. They have different textures and colors.

I used green, purple, red and orange to build this image (#FFA500, #FF4040, #9400D3 and #7CFC00 respectively), used four color textures to differentiate the colors of the bubbles and used reflective textures to add a sense of transparency to the bubbles, so they can map outside colors between them, which makes the whole image feel more like a whole. Also the addition of white ambient and spot lighting brightens the image. I tried to use some pink, red or blue light but it didn't turn out very well, so I ended up changing the color of the light to all white. The bubbles are scattered throughout the space and they keep rotating in different positions to reflect the ambient light and add some dynamics.

I set the camera to move to show all the bubbles, while dragging the screen with the mouse to see all the bubbles. This makes the whole code more interactive.

While running the code, clicking on the screen plays music. I imported the pure music of Outer Wilds, which is the soundtrack to my favorite game Outer Wilds, it's light and happy and suits the mood I wanted to convey. So when the visuals and the sound are combined, the whole picture gives me a more cheerful feeling.

The code was finished by this time, and I am very grateful to my classmates who helped me a lot and taught me a lot about it. This was my first more complete assignment after being introduced to JavaScript and it also gave me a great deal of relief and sparked my interest in coding, although I still have a lot to learn, but I think it is a good start.