

Pengxiang Zhang (PZY0711)

Dr. Tumblin

EECS-351-1

15/11/2021

Project B: Flying Through a Abstractionism Water-tap

User's Guide

To look around of the 3D grid can be controlled using the keyboard with keys “W”, “S”, “A” and “D”.

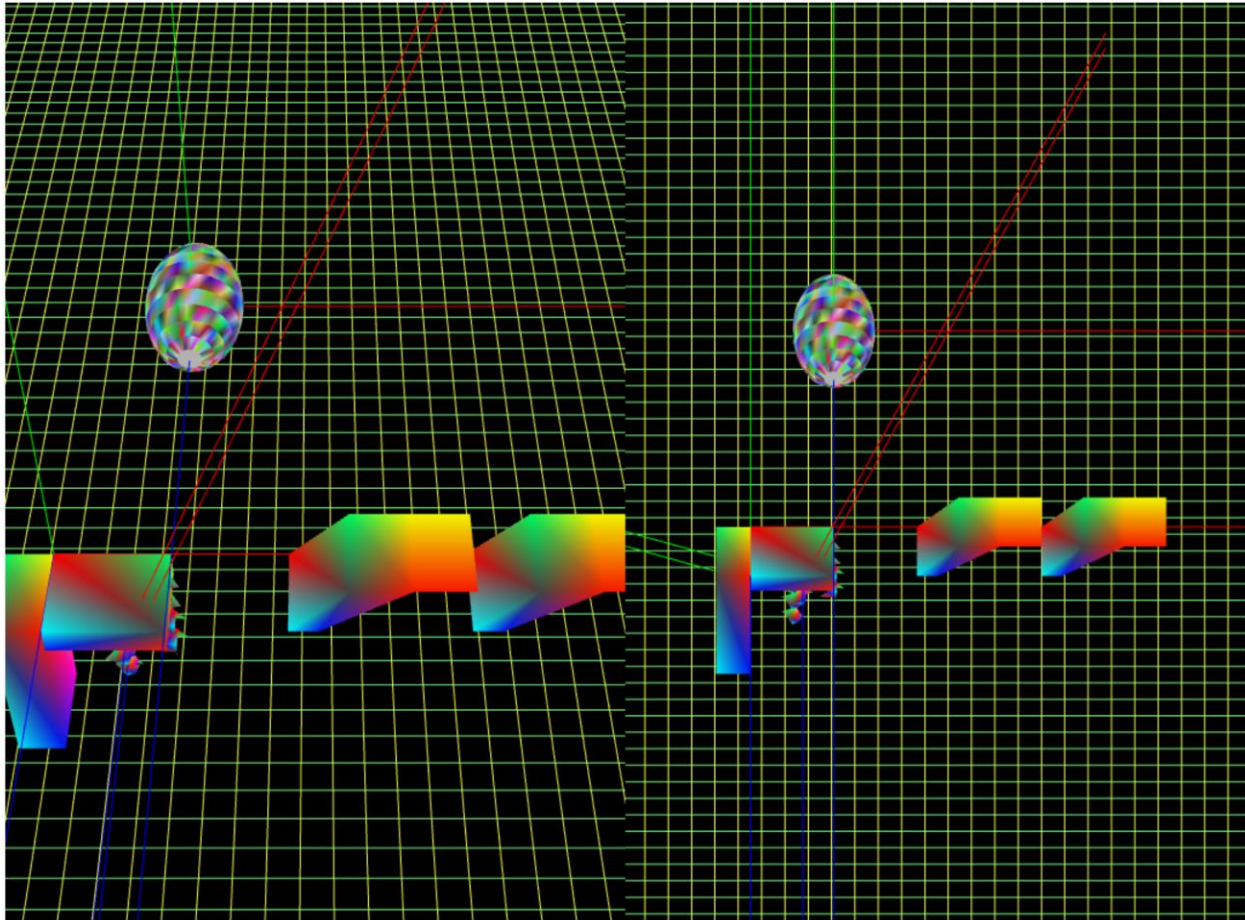
To zoom in and out can be controlled using the keyboard with keys “↑” and “↓”.

The rate of the water coming out from the pipe (Spin of the 3D object) can be controlled using the keyboard with keys “I” and “K”.

The rate of the water flow (moving speed of the 3D object) can be controlled using the keyboard with keys “J” and “L”

You may drag and spin using the mouse on the webpage to rotate the sphere.

Result



- To look around, use the WASD keys.
- To zoom in and out, use ↑ and ↓ Keys.
- To move the sphere, drag the viewport using your mouse.
- To control the speed of the object, you may use IKJL keys.

Figure 1 - Initial View

This is the view when the user first loads the webpage. The hexagon on the left side is the water tap. The heptagon on the right is the switch of the water tab, The quadrilateral under the water tap is the model of the flow of the water. On the top, there is a ball that can be rotated by mouse is represented as a sponge.

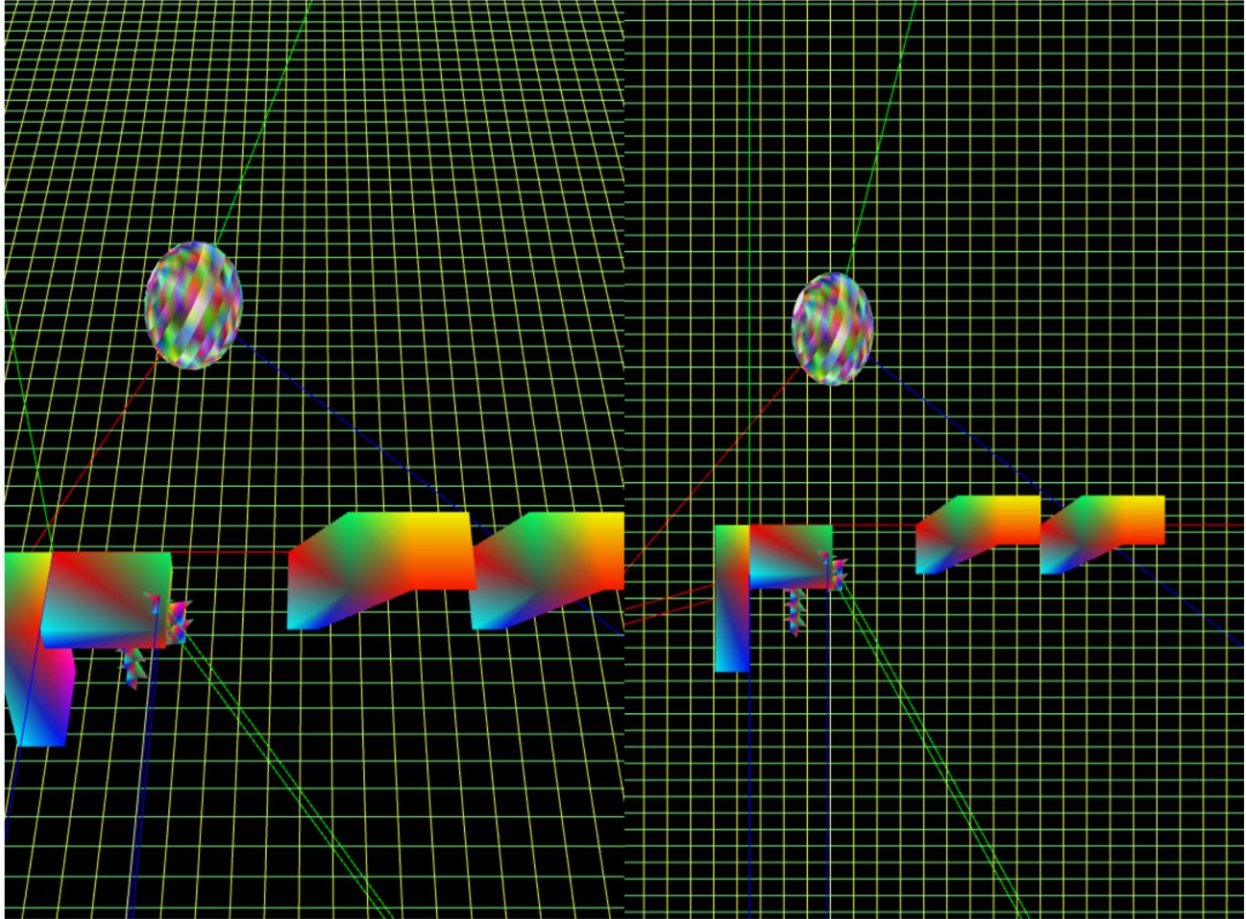


Figure 2 - Spin 3D Shape

The sphere can be rotate using the mouse when user drag the object around.

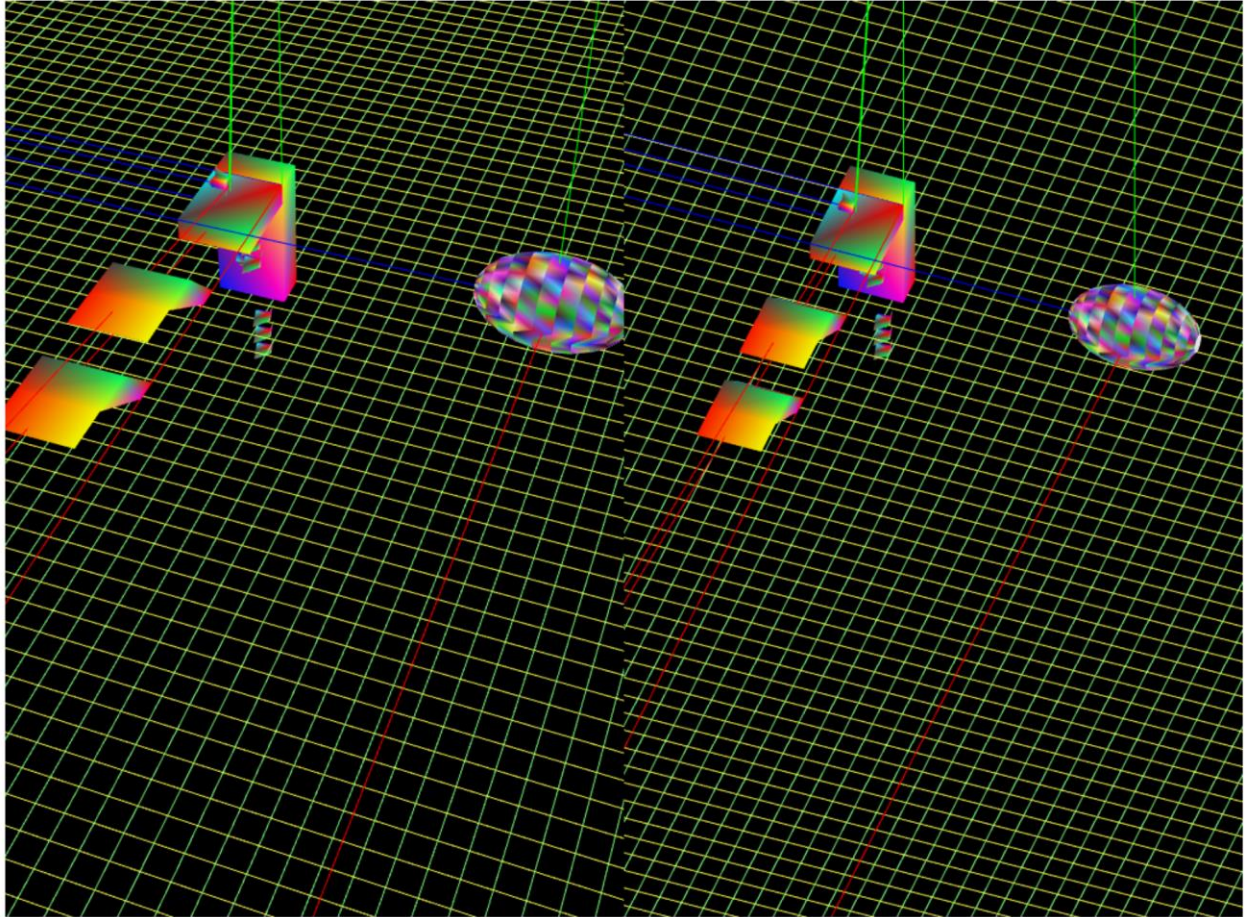


Figure 3 - User Fly Around

User can control the camera to see the 3D grid.

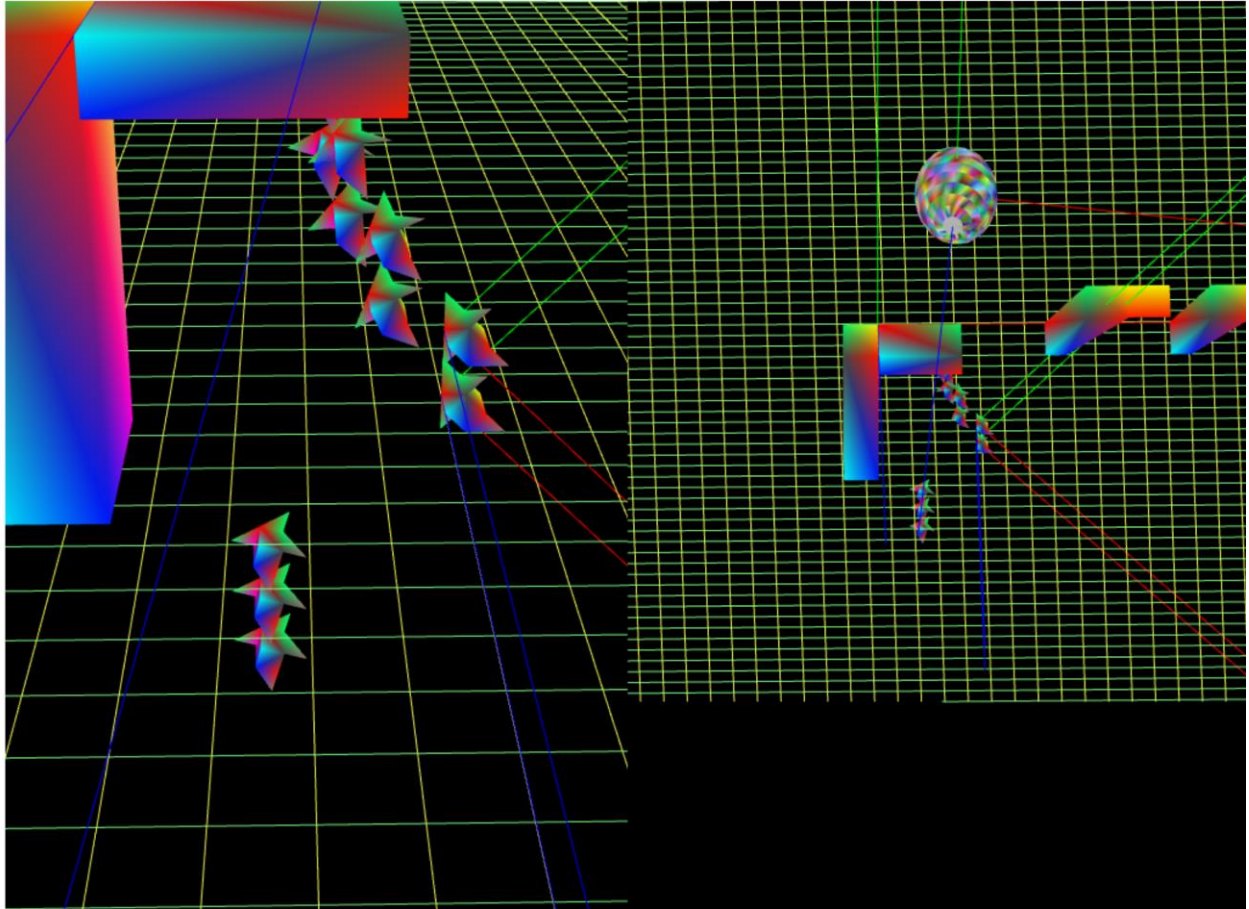


Figure 4 – Joint

All the 3D object on the left side(water-tap) are joint using the same matrices from your model matrix.