

# Project A : Sphere, Cylinder and connected tetrahedron

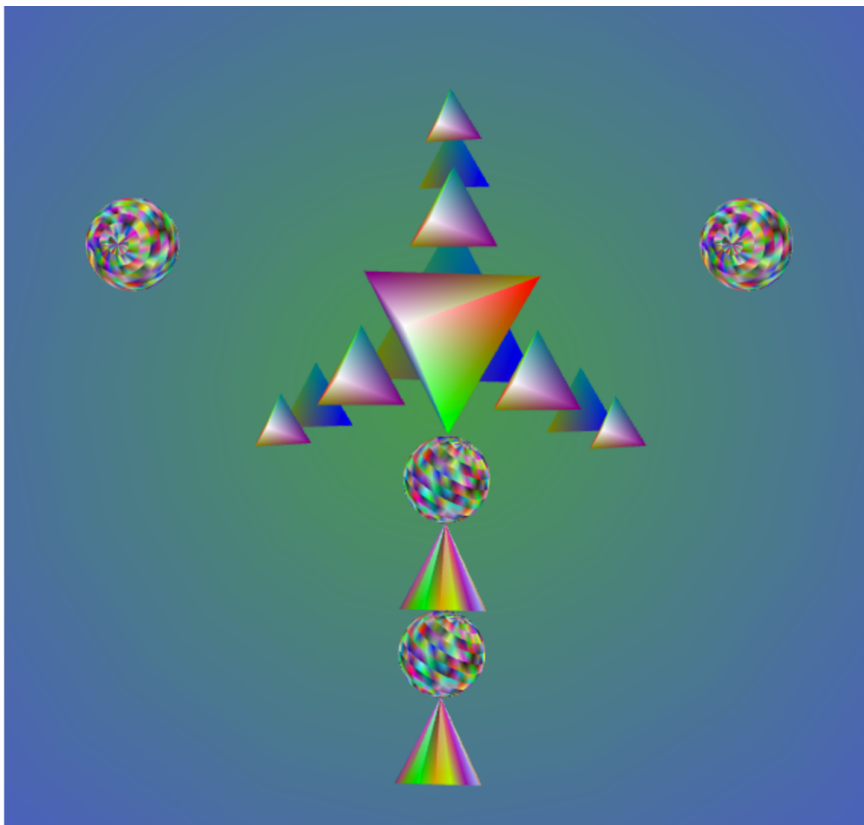
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## ***User's Guide:***

1. It is a simple program to run by clicking at ProjectA\_ZhaochengYu.html file.
2. You can see the whole graph with three different buttons as well as a brief hint.
3. By click those buttons , you can accelerate ,decelerate or completely stop the whole moving graph.
4. By click F1 , you can see the instruction about dragging your mouse and press the direction key. Just do that you will find something.

## ***Result:***

1. My program contains three parts. Several jointed tetrahedrons, connected spheres and cones, and two orbiting distinct spheres as well as a colorful background which actually is the base side of my cone. As you can see in Figure 1.



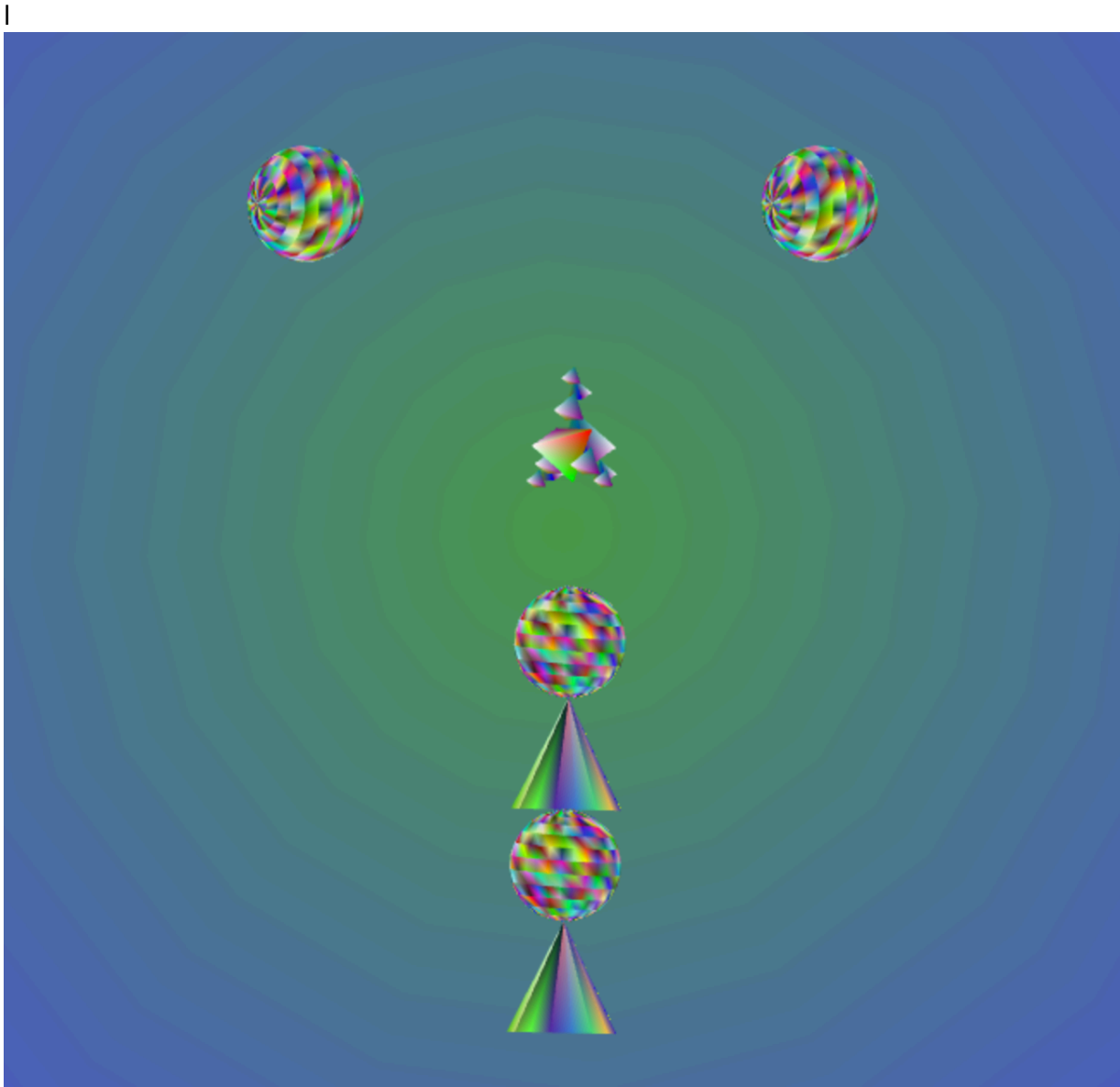
(I was intended to draw a flower ~! Now it becomes something else, sort of)

Speed\_up Speed\_down Runstop

You can drag your mouse and press the direction key

*Figure 1*

2. In tetrahedrons part, all of them are connected and I put variable yMdragTot on the modelmatrix.scale() function in order to modify their scale when user drag their mice. To be specific, the size of tetrahedrons change only when user move their mouse in y-axis because I do not use variable xMdragTot here. In figure 2 , the size of those objects change.



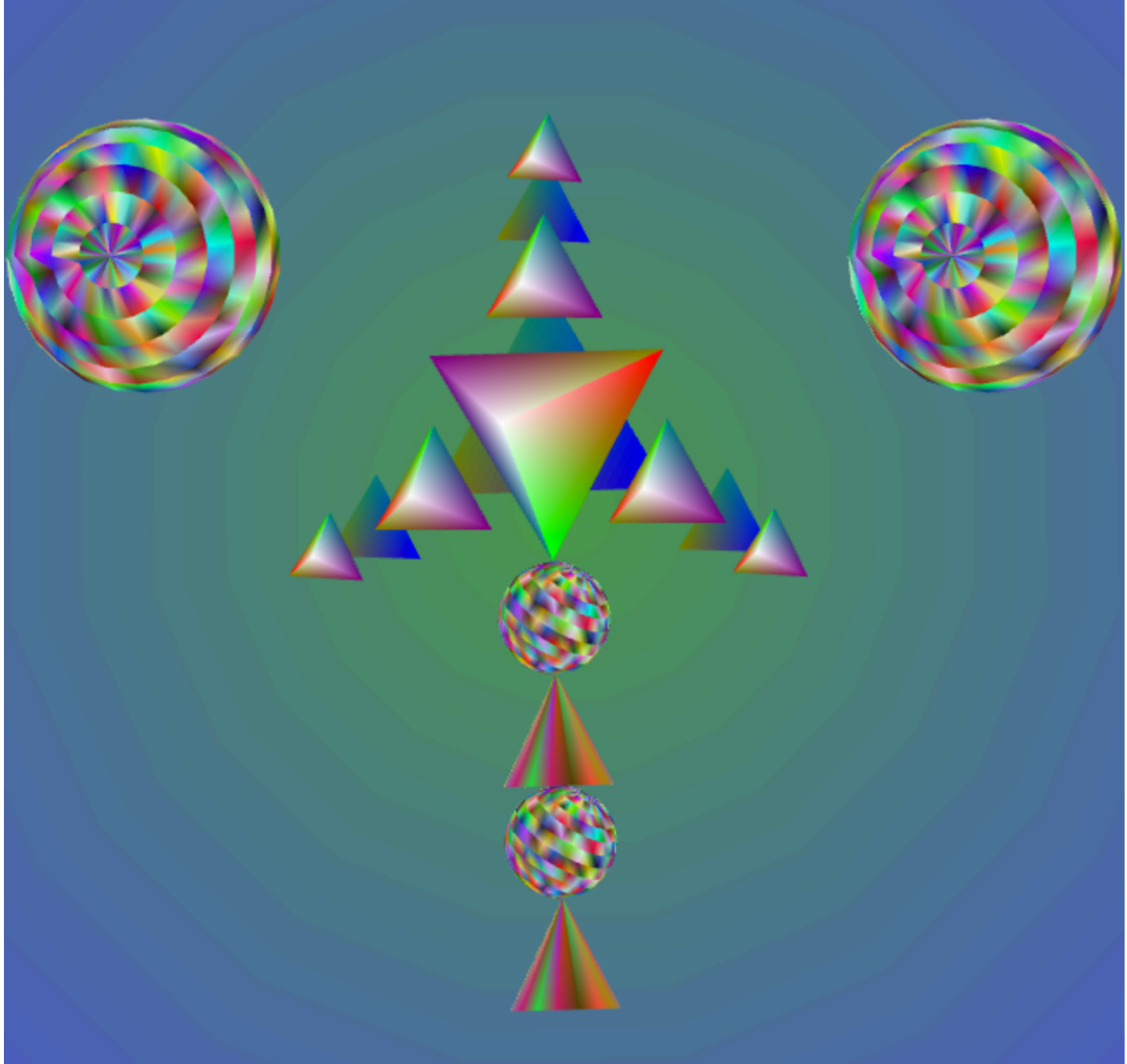
(I was intended to draw a flower ~! Now it becomes something else, sort of)

[Speed\\_up](#) [Speed\\_down](#) [Runstop](#)

You can drag your mouse and press the direction key

*Figure 2*

3. As you can see there are two spheres orbiting around the tetrahedrons part. Honestly, you could not see them when you click the html file. Because they are very small. However, I use xMdragTot in their size. If you drag your mouse in the x-axis direction and I also use window.addEventListener"keydown" to relocate them. See in figure 3 and figure 4.



(I was intended to draw a flower ~! Now it becomes something else, sort of)

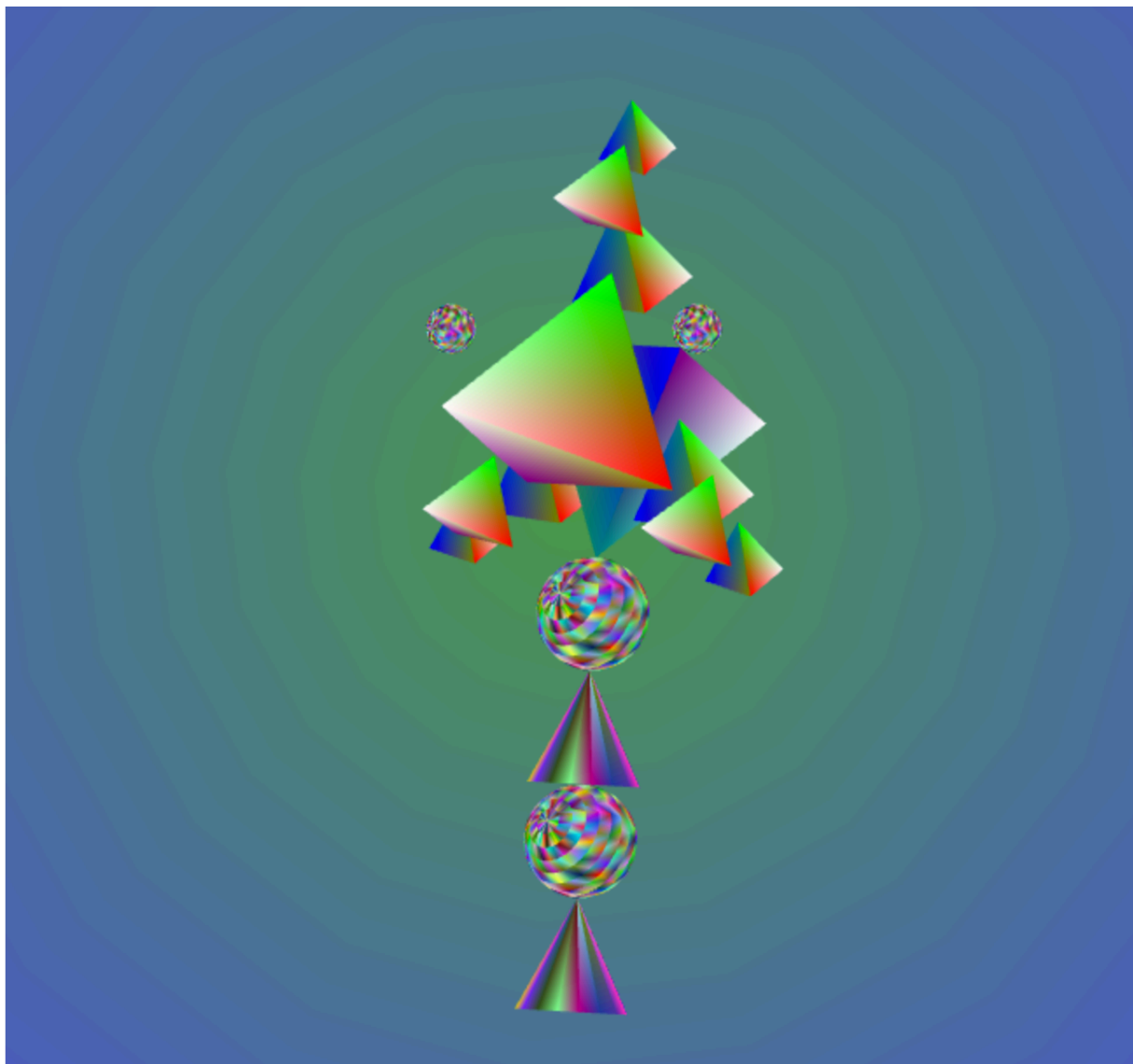
Speed\_up

Speed\_down

Runstop

You can drag your mouse and press the direction key

*Figure 3*



(I was intended to draw a flower ~! Now it becomes something else, sort of)

Speed\_up

Speed\_down

Runstop

You can drag your mouse and press the direction key

*Figure 4*

4. Objects left are cones and spheres which make up the support base of the whole picture. They are all connected and orbit around their own  $y$ -axis. And you are also welcomed to use buttons list at the html and up arrow or down arrow key.

Very appreciated that you could grade this report.