

## Project A: Spaceship and Star Pendant

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### User's Guide:

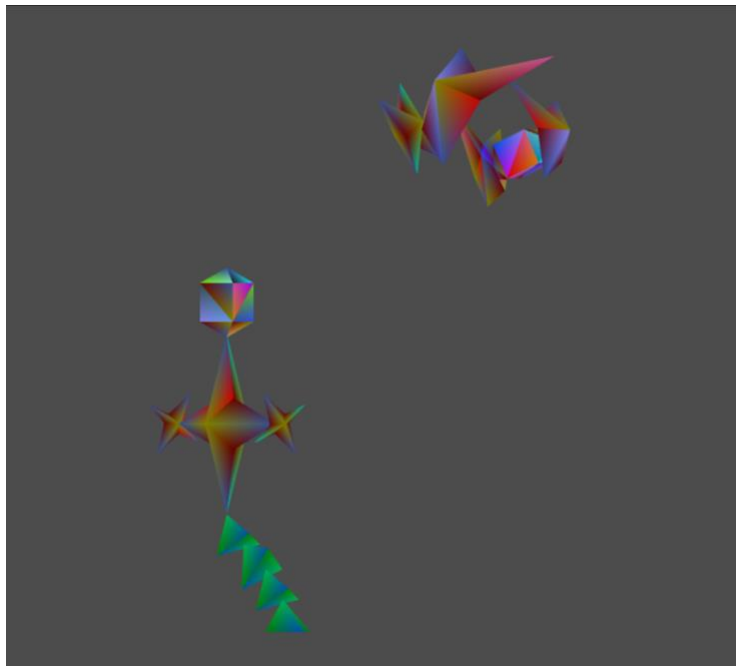
The project has two main parts, the Star Pendant in the lower left side of the canvas, and the Spaceship in the upper right side of the canvas.

Without any keyboard input, the Star Pendant will rotate and move up and down by itself. The keyboard input “W” can increase the moving speed (up and down) of the pendant, and the keyboard input “S” can decrease the moving speed (up and down). There are also two buttons called “Decrease Moving Speed” and “Increase Moving Speed”, which can also control the moving speed of the Star Pendant.

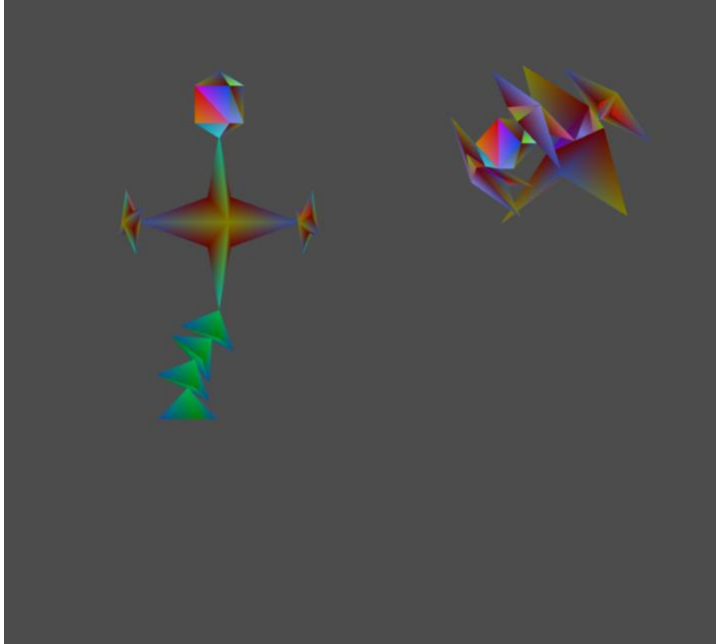
There are two buttons called “Decrease Rotation Speed” and “Increase Rotation Speed”, which can control the rotation speed of the Star Pendant. The keyboard input “A” can move the pendant to the left, and the keyboard input “D” can move the pendant to the right.

The Spaceship will rotate around itself without any input. And the Mouse can drag the spaceship to any location on the canvas. The “Clear” button will reset the spaceship to its initial position.

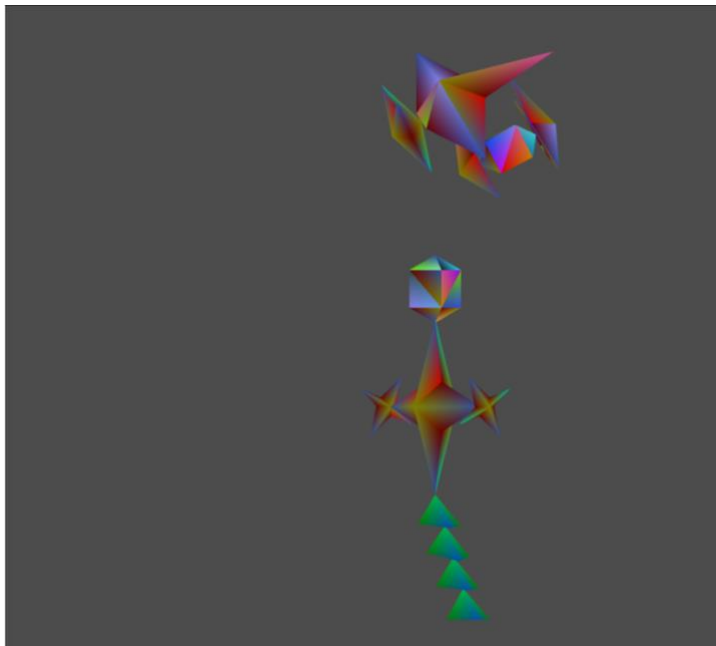
### Result:



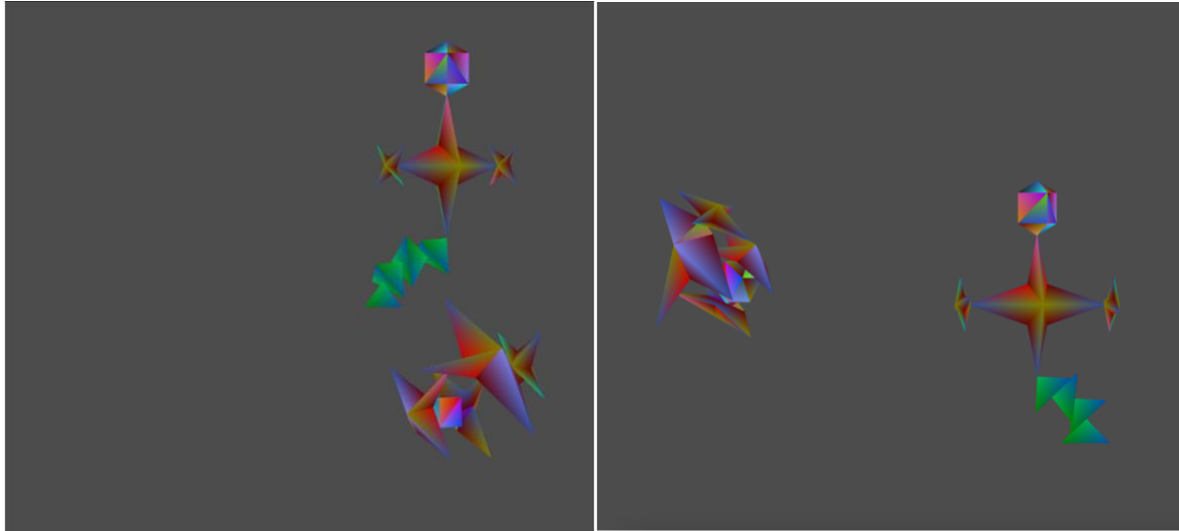
Initial location of Star Pendant (lower left) and the Spaceship (upper right)



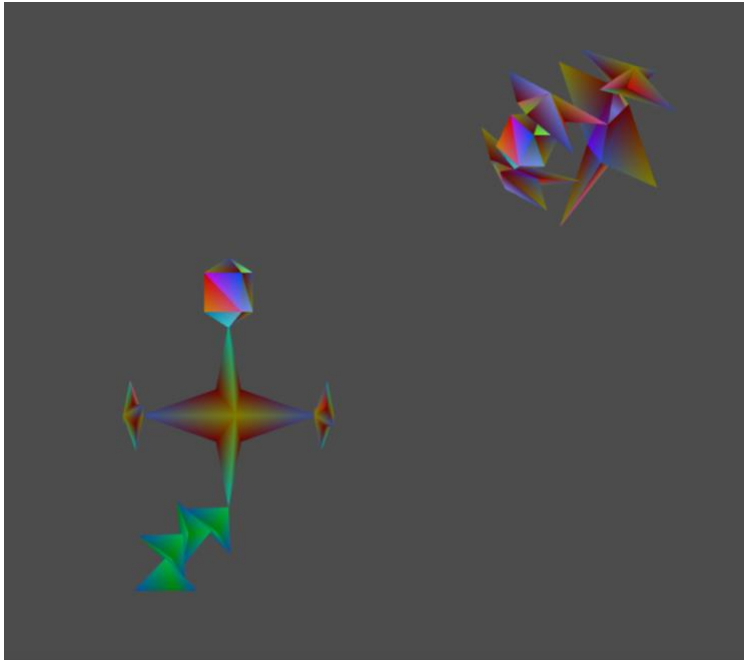
Without any input, The Star Pendant will move up and down and rotate by itself, and the Spaceship (upper right) will also rotate by itself



With Keyboard input “A” and “D”, we can move the Star Pendant to the left or right.



By using mouse, we can drag the Spaceship to any location in the canvas.



By clicking Clear button, we can reset the Spaceship to its initial position, and by Keyboard input “A”, we can also move the Star Pedant to the left and back to its initial position.

**Scene Graph:**

