Juichi Lee

Mike Bailey

CS 457

2/23/2021

Project6: Cat Menagerie
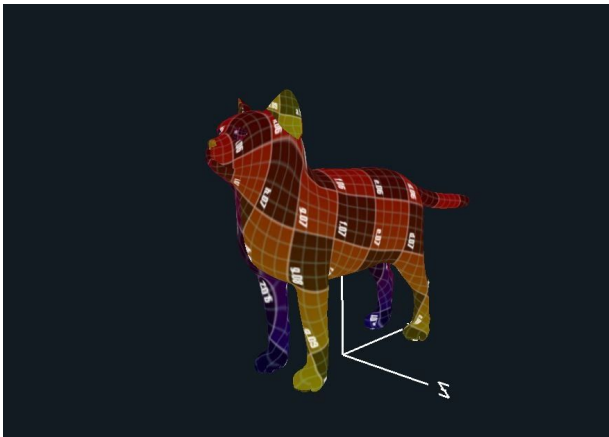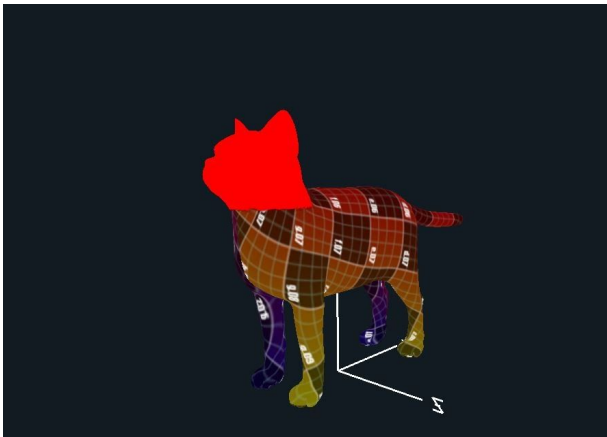
Email: leejuic@oregonstate.edu

Link to Demonstration Video(Youtube): https://youtu.be/mesVr6NWdn8

Explanation:

As the precursor to my final project, I constructed a 3D magic lens in the form of a cube. I did this by assigning a center point and adding other variables to the cube that determined its transformation and scale. In the vertex shader, I checked if a given vertex was in the cube's bounds and applied modifications to it if it was. These modifications included offsetting its transformations, changing its scale, and changing its color. The program gives the user the freedom to change whatever they like on the cat.
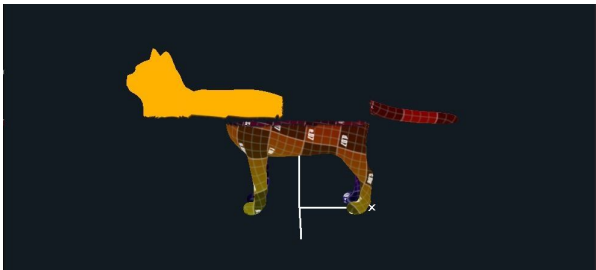
Images:

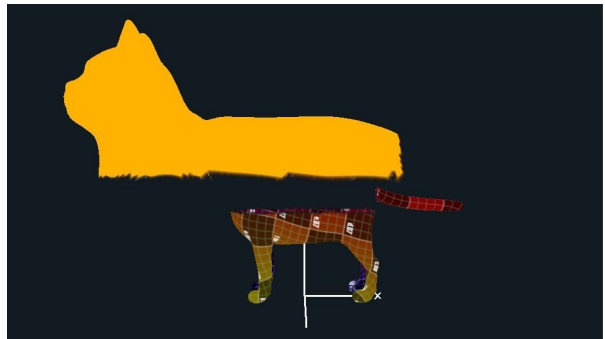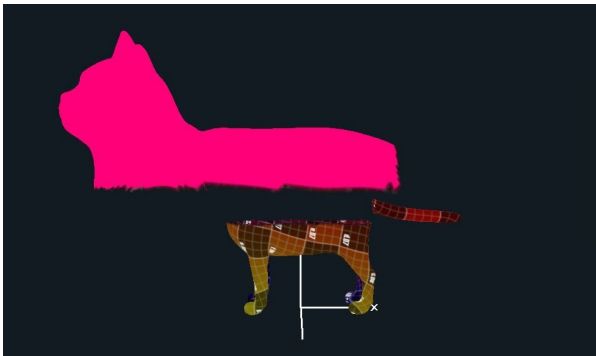| Regular	Moving the Magic Cube
Scaling the Magic Cube	Locking the Magic Cube
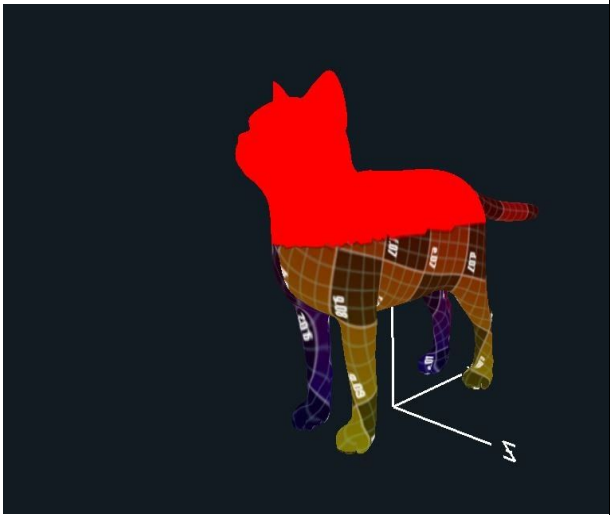
Moving the Selection	Scaling the Selection
Changing the Color of Selection	Changing the Alpha of Selection