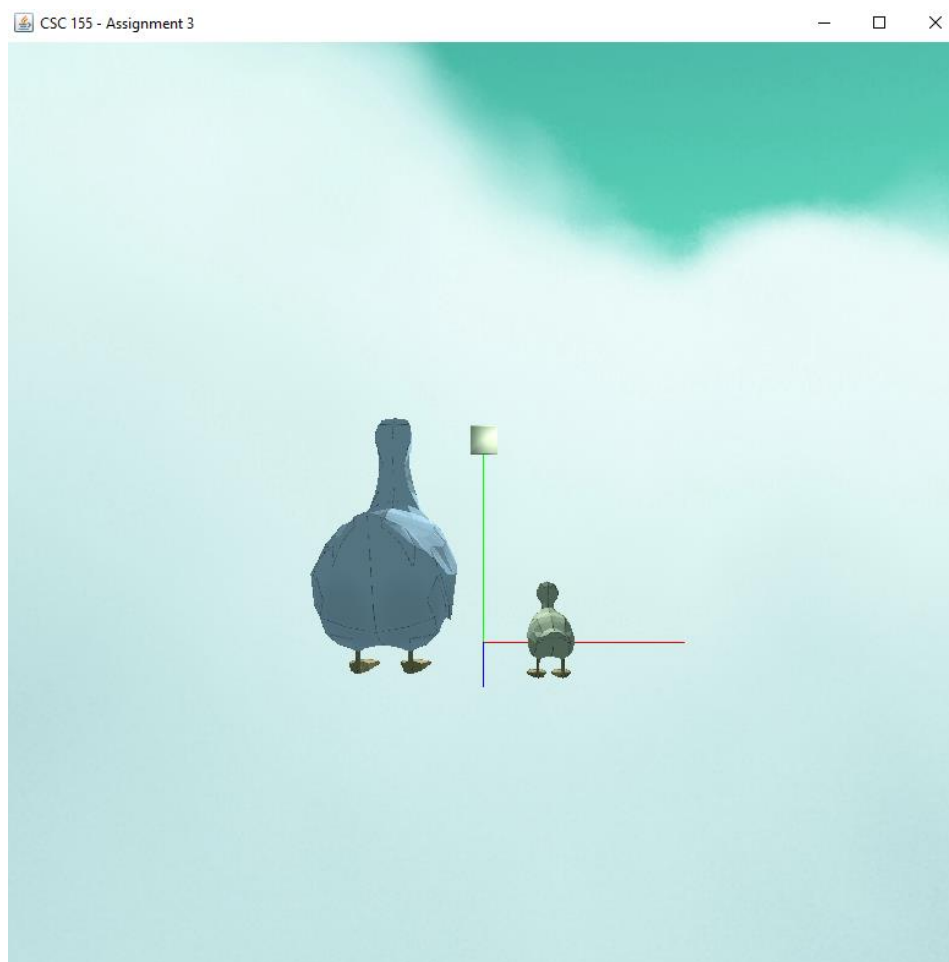
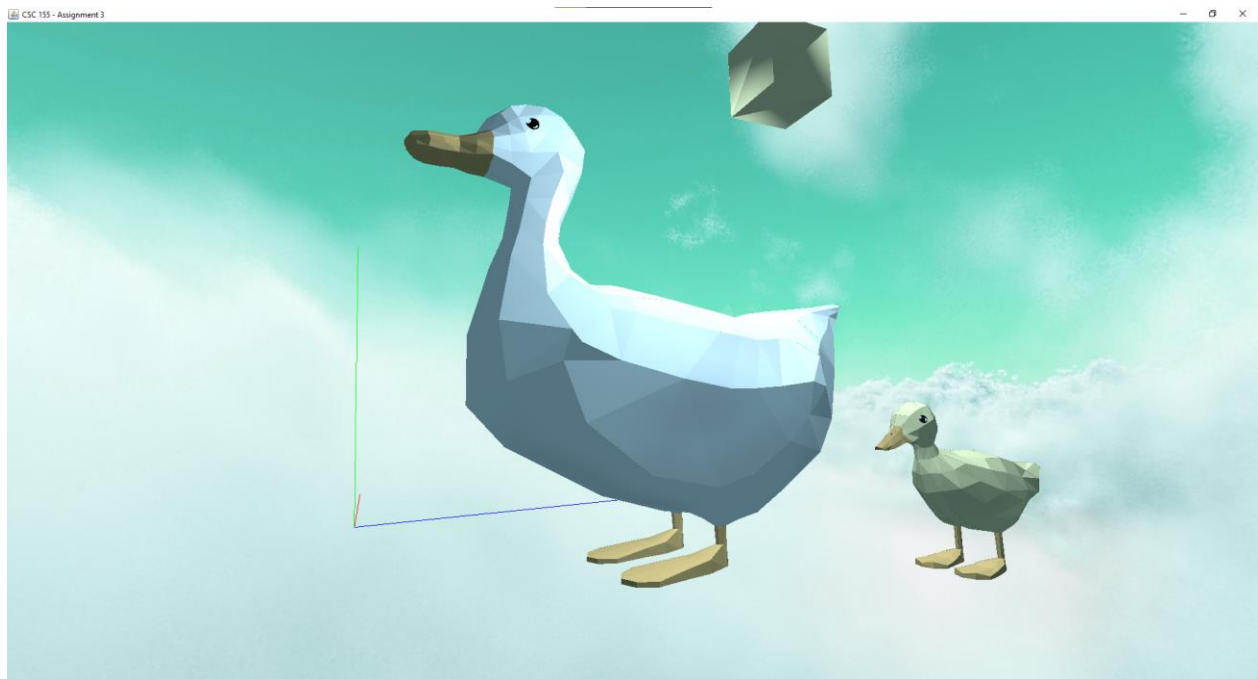


1. a screenshot of your running program, showing as many features as possible



2. a description of your lighting – the types of light(s) and initial location(s)

- Global Ambient Lighting
 - N/A, it is applied everywhere
- Positional Light
 - Initial Location:
 - $X = 0.0f, Y = 3.0f, Z = 0.0f$

// custom light properties

Global Ambient = { 0.7f, 0.7f, 0.7f, 1.0f };

Light Ambient = { 0.0f, 0.0f, 0.0f, 1.0f };

Light Diffuse = { 1.0f, 1.0f, 1.0f, 1.0f };

Light Specular = { 1.0f, 1.0f, 1.0f, 1.0f };

3. a list of controls for moving the camera

KEYBOARD:

W = Move camera forward

A = Move camera left

S = Move camera backward

D = Move camera right

Q = Move camera upward

E = Move camera downward

UP ARROW = Pitch camera up

LEFT ARROW = Turn/pan camera left

DOWNARROW = Pitch camera down

RIGHT ARROW = Turn/pan camera right

4. list of controls for moving the light

KEYBOARD:

I = Move light forward

J = Move light left

K = Move light backward

L = Move light right

U = Move light upward

O = Move light downward

MOUSE CLICK AND DRAG:

LEFT OR RIGHT = Moves light cube to the left or to the right

UP OR DOWN = Moves light cube forward or backward

MOUSE WHEEL:

UP = Moves light upward

DOWN = Moves light cube downward

5. a description of where in your scene the matrix stack was utilized

Yellow duckling chick, is rotating around the white mother duck.

6. list of which requirements you were NOT able to get fully working

I was unable to get the second material, gold, working. ½ Materials implemented

// the first material's properties were implemented only

Material Ambient = { 0.5f, 0.7f, 0.8f, 1.0f };

Material Diffuse = { 0.8f, 0.9f, 1.0f, 1.0f };

Material Specular = { 1.0f, 1.0f, 1.0f, 1.0f };

Material Shininess = 250.0f;

7. and licensing information for each texture and model that you used

- cubeMap files are from professor texture resources, but I edited it to be green
- duck.obj and duckling.obj are models created by me personally in Blender
- duck_uv.png and duckling_uv.png are also generated using Blender and painted by me

8. indicate on which RVR-5029 (remote) machine you tested your program

Tested program in RVR-5029 machine, ECS-TEKKEN