

The 5 Features:

1. Environment Mapping - the dolphin above the bread
2. 3d-Texture (Green and Red Dolphin)
3. Normal Mapped Sphere (Couch Cushion)
4. Geometry Shader Dolphin (It's huge, you can't miss it)
5. Tessellation Shader Sky Above (there is a reason I put this one last)

//////////Models Used//////////

//From the book//

Dolphin, Sphere

//Downloaded from TurboSquid//

//Royalty-Free License//

<https://www.turbosquid.com/FullPreview/Index.cfm/ID/1259409>

What I like to call Dr. Gordon's Bread filename: 'bread.obj'

//////////Camera Controls//////////

'w' - forward

'a' - left

's' - backward

'd' - right

'q' - up

'e' - down

'down arrow key' - pan down

'up arrow key' - pan up

'left arrow key' - pitch left

'right arrow key' - pitch right

'x' - reset Camera position

//////////Axis//////////

'y' - toggle XYZ-Axis On/Off

X-Axis(Red),

Y-Axis(Green),

Z-Axis(Blue)

//////////Light Controls//////////

'i' - forward

'j' - left

'k' - backward

'l' - right

'u' - up

'o' - down

'n' - toggle SpotLight On/Off

'm' - reset Light Position Mouse Drag to change the x-axis and y-axis position of the light

Note: the Mouse Drag has some bugs but it works well enough.

Mouse Wheel scroll to change the z-axis position of the light

*****Note: *****

Please maximize the screen to make the Mouse Drag work the best.

I had to do some funky calculations to get it working properly enough. It does not follow the mouse perfectly

but it is close, please be kind.

*****Additional Note: *****

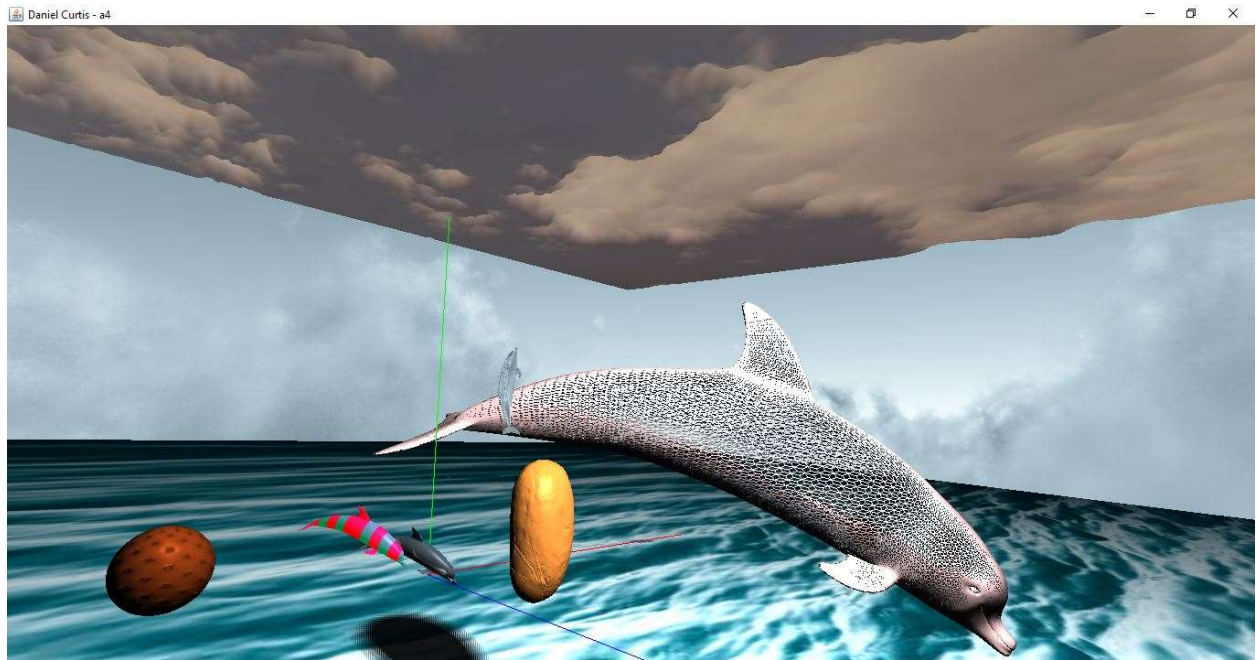
Everything works mostly finally! You will have to zoom out or perhaps scroll the mouse to see the sun, but it exists.

The scene might not be fully coherent, but I like the bread, I stand by that bread.

I hope you enjoy this project as much as I have enjoyed your class.

Thank you so much for being a great teacher.

Screenshot



Tested and Works on Hydra