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CS330 – Final Project

The picture I chose to turn from 2D to 3D is the picture at the end of this document, I wanted to transform the monitor, the vase, the open notebook, and the stack of books into 3D, so I first started creating the monitor, I did that by creating a box to act as a base and then a plane to act like the connecting piece between the base and the monitor which is made out from a box, the I created the vase by having a tapered cylinder inside a regular cylinder, the stack of books is a stack of boxes that differ in colors and size and position, Lastly the open notebook was the most challenging one to emulate, I created the left size using a plane and then created the right side which in the picture is thicker (has more pages) using a box, but the most challenging part of it all was creating the binding rings I used 9 very small toruses to act as binding rings, it required a lot of trial & error to get the size, position, orientation, right but I think I did a good job emulating it.

Controls to know to use the program, WASD acts as forward, left, backward, and right movement, you can make movements faster by rolling the mouse’s scroller forward, Q moves you up, E moves you down, clicking on O will change the view to the orthogonal view, clicking on P will switch the view back to the default projection view.

The functions in the program are designed to be reused and added on, so the meshes are already loaded with several different shapes to choose from to add a shape the programmer can add a Draw<shape>mesh(); to draw a shape. That makes it easy to create more shapes without creating new functions from scratch.

A computer on a desk

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