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CS450
MW 10am - 12pm
10/16/23

Project 2 Write Up

I started this project by creating a circle object and then drawing the circle with a radius of 2 around the starting point using the callList() function. Then I used the CarouselHorse file and the provided code on the project page to import the vertices and draw the horse. Then in display(), I did:

```
float theta = 45 * sin(3 * (F_2_PI * Time))      // determines the rocking motion angle
                                                 and how fast it rocks.
glRotatef(360*Time, 0, 1, 0)    // rotates the horse around the Y-axis 360 degrees.
glRotatef(theta, 1, 0, .5)      // creates the rocking, and up and down movement.
glTranslatef(2, 0, 0)           // move the horse to the perimeter of the circle.
glRotatef(90, 0, 1, 0)          // to rotate the horse to face the correct direction.
glCallList(displayHorse)        // to draw the wireframe horse
```

Then I added PushMatrix() calls before every horse and PopMatrix() calls after every horse, and then basically copied and pasted the above code, slightly tweaking the numbers for every horse to provide variation among all four horses.

Lastly, I created a menu button called "View" to toggle between the inside and outside gluLookAt() calls. I then placed a simple if statement inside the display() function to tell the program how to toggle between the 2 different views.
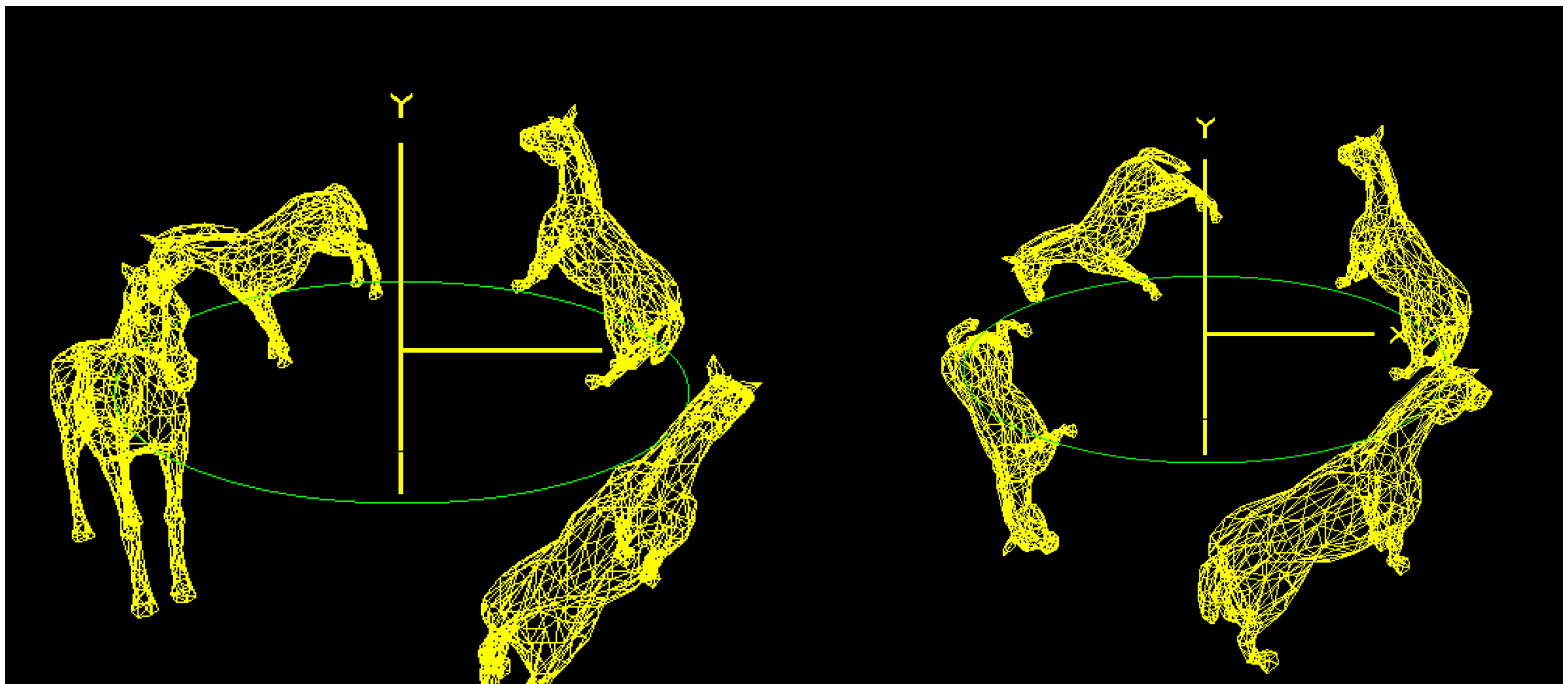
Video Link: https://media.oregonstate.edu/media/t/1_jjo57euh