Project 11

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Cs151

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Project 11

Abstract:

In this project, we used the new and fun topic of three-dimensional drawing to create objects from classes and then implement those objects to create scenes. To make these scenes a reality, I used turtle, functions, classes, and lsystems; most of the things that I have learned in this course were used in this project.
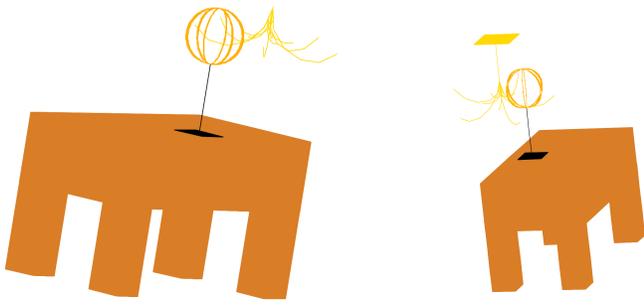
Required Image #1:

For the first task I drew my shapes in R3 spacing them out so that they could all be seen. I then created a new NPR style as an extension and applied it to my shapes.
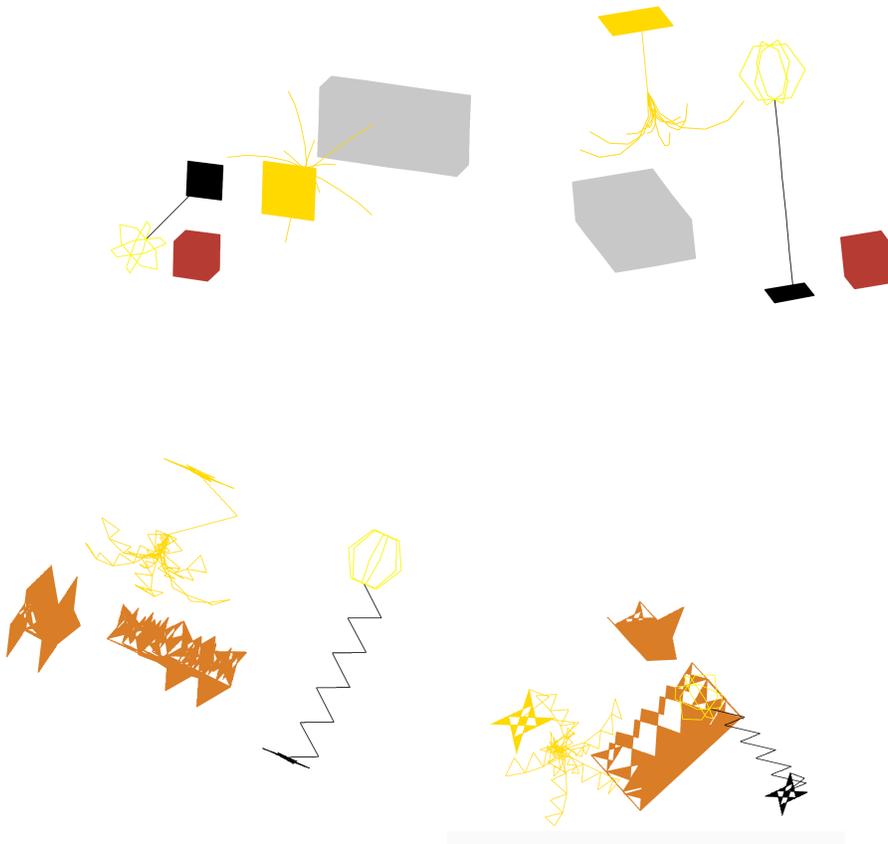

Required image #2:

Here I used the cubes as legs for a desk scene. I shortened the length of the lamp with the geodesic sphere as well as the chandalier to create the following scene.

Required Image #3:

 For the Final image, I knew I wanted to create more geodesic shapes as well as layer objects to create an all-encompassing scene. I decided to create a bedroom scene that would layer my rectangular objects like bedsheets on top of four bedframe legs. I wanted to create a more complex scene than my previous one.
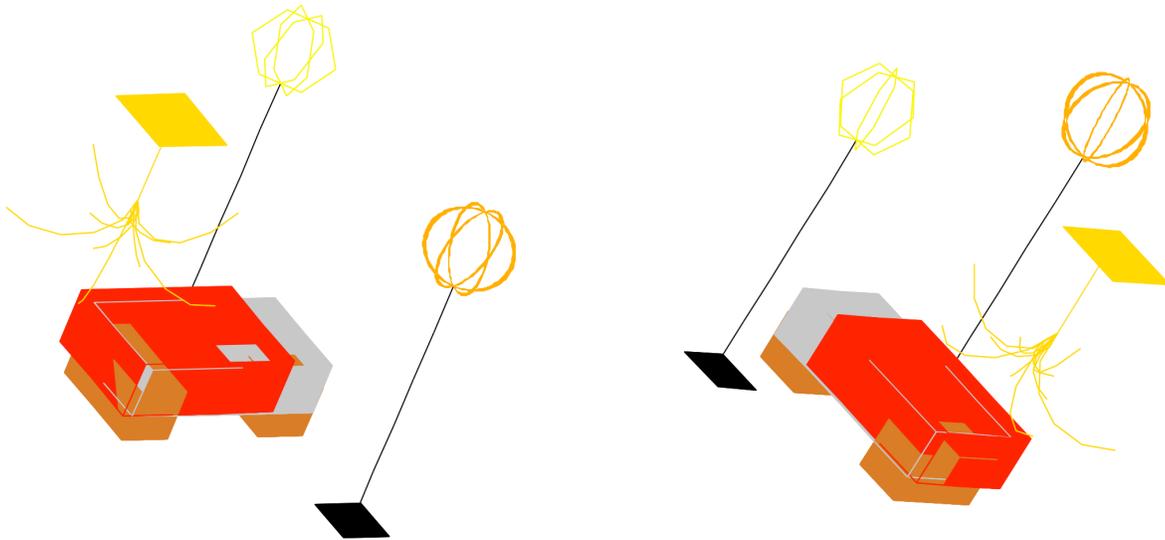
Extension Image #1:

 I decided to make another scene as an extension, however, I liked working with objects in R3 and decided to make some new objects as well. I decided to make the Colby sun seal.
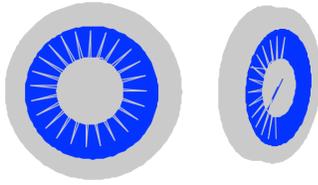
Reflection:

This project implemented a new, and interesting, topic which was the addition of the third dimension in python turtle. while this seemed daunting at first (especially because of my raincheck due to my concussion) the errors and problems that I worked through were solvable on my own. I enjoyed this project probably the most because it was more satisfying to create objects and scenes In R3 than R2. using the shape class was how these objects were created, using new parameters such as pitch and yaw. I joined strings together to create the shapes and then simply placed them in the window to create scenes.

Extensions:

- Additional scene
- Additional shape objects
- Geodesic sphere
- Geodesic hexagon
- Went far beyond necessary shape complexity: chandelier, Lamp, Colby seal
- Created a new NPR style in R3: created a new extension style for project 11 that was not used in project 10

What I learned:

What I gained by working on this project was experience working with three dimensional turtle. I spent a lot of time making my shapes, and, normally I am very good three dimensionally. However, it was challenging to figure out the heading of the turtle cursor at any given time (mostly because I had to break this project up into many small work sessions because of my concussion)

Citations:

N/a