



For this project I used this image as my guide. The only thing that isn't shown in this image is a second dock off to the right which I did put in my project to get more objects and add complexity to the scene. The scene depicts many objects such as planes, cylinders, spheres, and boxes, which all come together to represent this image.

When I was writing the code I found I was having a hard time integrating textures and lighting, so I made the decision to not use them and go for partial credit.

I chose to use the objects listed previously because I felt they could best represent the scene while also being easy enough to manage. Most of the objects are coded as their own item, however with the posts on the right-hand dock I discovered I could use an array to help streamline the coding process. I could have used an array for the left dock too considering its just repeating shapes, but I didn't know about it at the time and frankly didn't want to rewrite code that already worked as intended. The real benefit to using this array was that making adjustments was easy, and I wasn't worried about editing the properties of a different object. Additionally with all the objects I decided to add a slight overlap with where the objects meet. I found that when two objects (especially of different colors) end on the same point the colors would become glitchy and it wasn't appealing to look at. By offsetting these objects by some small margin of

0.1 or somewhere around there I was able to have objects intersect with one another but hide the visual glitches.

I don't believe I used too many functions that are very reuseable. The best example for a reusable function would be something like PrepareScene, where by loading all the shapes I intend to use I can then make as many of them as I wish. Another function that can be reused is ProcessKeyboardEvents, this is one that can be adjusted to theoretically give every key on the keyboard some sort of purpose. One thing I wish I did more of was create shapes through an array. I only learned about it at the tail end of the project and think it could have done a lot for me readability and organization wise.