SNHU CS 330 Module Seven Project Reflections Report

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I am excited to reflect over the course of the past few weeks, the transition and growth that each of us made learning a new application, concepts, and applying them to an interactive space. I will be covering the elements I applied to have been successful in this course. I’d like to mention that I tried my best to use what I had and match as closely as I could to the design and my original photo. I understand that keeping the program modular so that I could reuse it later on would create this program to be adaptable in any future projects and this required separating the algorithms for shape building and methods used to render the scene. To simplify my usage of classes and flexibility, I meshed all the scenes creating items into their own class so that I can manipulate them with ease. I worked through the GLMesh structure attempting to incorporate all the essential attributes of the shapes. With the shape's intricate assembly like the texture, scaling, and transformation within the spatial context, the mesh is contained into the collection scene. This then transforms the meshes through the render process and each shape being rendered on the display. This arrangement helped with streamlining the codebase and will assist with algorithmic reuse. The navigation of the application is made of multiple functionalities making users to be able to change on-screen content. Camera movement uses WASD keys for basic movements and Q and E for vertical shifts, while the mouse will steer the camera's perspective. To add more depth, the IJKL keys allow movements across the x and z planes and U and O are for vertical shifts. The utilization of camera and light positions, properly linking object location to vector modifications. Every key will stimulate an alteration in the vector's designated position, whether implemented in the camera.h module or directly in the primary source code.I believe within the shape builder class that these methods showcase versatility. Allowing complex points and coordination to fall into place and develop intricate detail and as the project comes to an end I believe its success was achieved by perseverance and finesse. The challenges with rendering three dimensional shapes or creating movement within the scene, the core was based on problem solving skills and focus.