Demitrius Peoples

Project Document Reflection

**Reflection**

* **Justify development choices for your 3D scene**. Think about why you chose your selected objects. Also consider how you were able to program for the required functionality.
* **Explain how a user can navigate your 3D scene**. Explain how you set up to control the virtual camera for your 3D scene using different input devices.
* **Explain the custom functions in your program that you are using to make your code more modular and organized**. Ask yourself, what does the function you developed do and how is it reusable?

My 3D scene features 6 shapes. 3 spheres, 1 cylinder, 1 box, and the flat plane for the ground foundation. I choose these shapes cause my scene was supposed to simulate suspended objects in space. For functionality I used the provided resources to program and modify the shapes to where I wanted them to be. My selected image from the proposal was a mountain on a landscape with some rocks and a tree. I chose to use a ground dirt landscape for the grass, and the sphere in replacement for the tree and mountain. Use of the sphere can help make the stones, use of the pyramid can help transform the mountain, use of the plane can help create the land space, and use of the cone can also help make the mountains, and some parts of the tree. There are more shapes to be used to create the objects in this image but that was just some. I just added a little spin to my 3D scene for some creativity.

Any user can navigate my scene as follows:

* “ESC” - close the window and exit
* “W” - zoom in " & “S” - zoom out
* “A” - pan left "& “D” - pan right
* “Q” - pan up” E” - pan down
* “1” - front view (ortho view)
* “2” - side view (ortho view)
* “3” - top view (ortho view)
* “4” - perspective view

These views give the user full mobility in moving around in my scene space. These views are keyboard enabled and can be used with the mouse cursor for up and down view functions.

The customized functions I added to my code were giving size adjustments to the shapes, adding lighting, and textures. These additions bring the project to a great place in terms of appearance and 3D space.