TDT4195: Visual Computing Fundamentals

Computer Graphics - Assignment 3 Report

5th October 2023

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1 More polygons than you can shake a stick at

c.

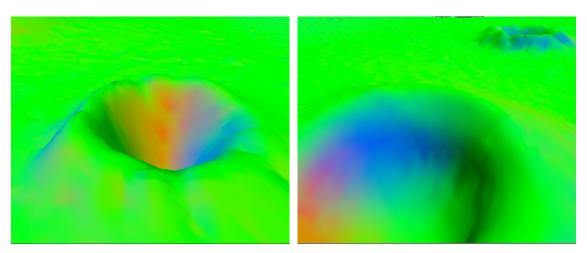


Figure 1: Lunar Terrain with the Normal Vectors as Colors

d.

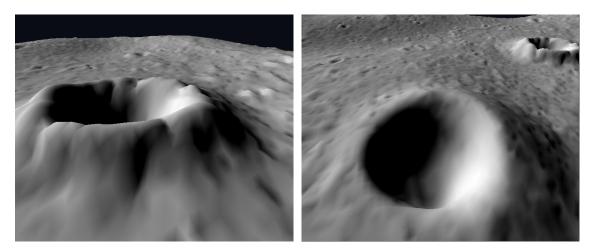


Figure 2: Lunar Terrain with the actual colors and some simple lighting

2 Helicopter Parenting

For this exercise, I organized my scene graph as shown in Figure $\boxed{3}$ below

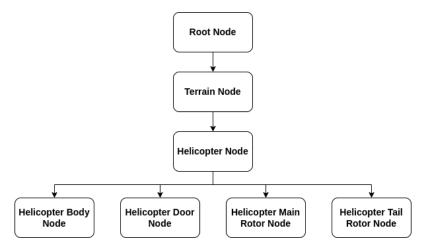


Figure 3: Scene Graph Hierarchy

 \mathbf{c}

The corresponding scene (terrain and helicopter) derived from the scene graph above is shown in Figure $\boxed{4}$ below.

Kindly note that I applied an initial translation and rotation to the helicopter to achieve the shown pose.



Figure 4: New Scene with both the terrain and a helicopter $\,$

5 Help! My lighting is wrong!

a.



Figure 5: Scene with the incorrect lighting model

c.



Figure 6: Scene with the corrected lighting model

6 Animate at least 5 Helicopters

a.

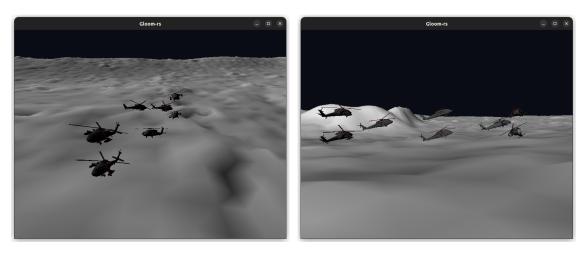


Figure 7: Animation of 8 Helicopters in the given path