Kadyrbek Narmamatov 20152005

Assignment #1

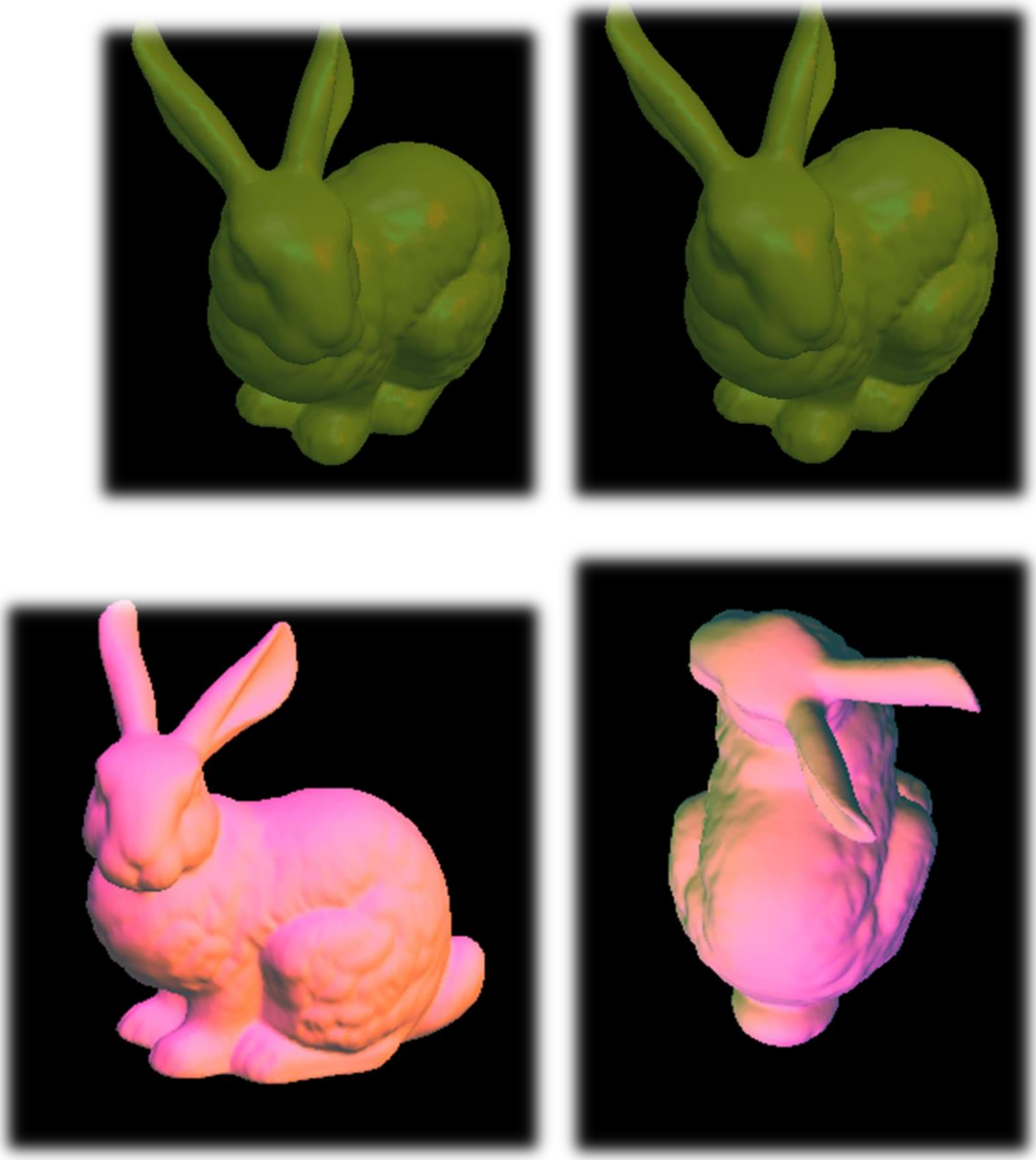
INTRODUCTION

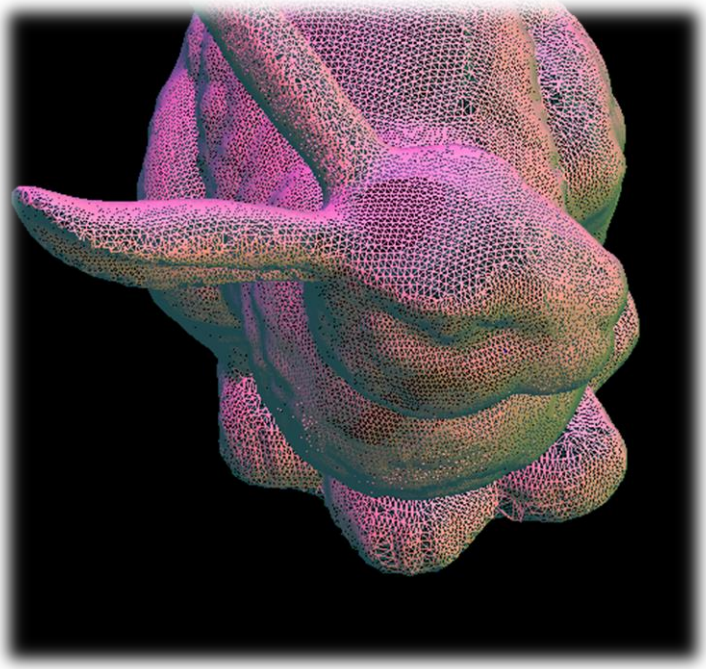
In this assignment, I was supposed to render an object from given file. Using many light sources and colors, we were tasked to do as realistic as we can. Also we had to include extra functions and different types of rendering such as Virtual Trackball, Keyboard callback, flat/smooth rendering and etc.

METHOD

The key part in this assignments, as I think, was rendering an object not changing pipeline with shaders. First of all, it was really hard for me, since there was no many “Hello World” program examples without shaders. But as I struggled, only using provided pipeline, I started to understand graphics pipeline more, though I was not changing it. Also it was difficult for me to choose beautiful and realistic light parameters, since there were a lot of combinations of them. I implemented all of functions and callbacks but I found a lots of questions than answers while doing my homework.

RESULTS





CONCLUSION

I think, the most important part was rendering part and understanding how normals, vertices and indicies are related and how are they rendered. Homework duration was very useful for me, since I could work on my bugs and understand them for a long time not just skipping or deleting code.

REFERENCE

Mostly, I used khronos and stackoverflow websites for functions usage.

http://stackoverflow.com/questions/5091570/most-basic-working-vbo-example

https://www.khronos.org/registry/OpenGL-Refpages/gl2.1/xhtml/glNormalPointer.xml

https://www.khronos.org/registry/OpenGL-Refpages/gl2.1/xhtml/gluLookAt.xml

https://www.allegro.cc/forums/thread/595000