**DVA338 Assignment 0**

The project works. I tried different animal as you can see below. Also, I commented glPolygonMode in renderMesh function to get filled triangles. I am also able to go forward and backward with z and Z.

A screenshot of a computer

Description automatically generated with medium confidence (Original)

A computer screen capture

Description automatically generated with medium confidence (Pressed z)A picture containing graphical user interface

Description automatically generated (With filled triangles)

**Overall Flow**

insertModel(…)

glutDisplayFunc(display)

view-projection

go over the meshList

renderMesh

init

prepareShaderProgram

glCreateProgram

go over the meshList

prepareMesh

**My understanding**

Rendering from 3D Model to

1) Scene

First, the window is created with the given height and width with the functions display, changeSize and keypress. Display creates view and projection matrices renders the mesh by drawing all the triangles. changeSize sets the window height and width. keypress enables to move the camera by z(forward/closer), Z(backward, further) and q(Quit).

World Space 🡪 View matrix 🡪 View Space 🡪 Projection Matrix 🡪Clip Space 🡪Transform 🡪Screen Space

2) Camera

cam object is created in the beginning with parameters. Later, in display function it is given as parameter to the matrices.

3) Image

insertModel() is function defined in mesh.cpp which takes meshList (initially NULL) and fills the list with mesh nodes based on the arguments of the function. init() function iterates over the meshList and prepares the meshes one by one.