



## Project 2



### Description

Attached Files:  [proj2-2013.pdf](#) (90.129 KB)



### Implementing trackball interface

Attached Files:  [vtrackball-new.pdf](#) (47.604 KB)



### Setting up the viewing transform

Attached Files:  [view.pdf](#) (62.948 KB)



### Notes on rendering the mesh

Attached Files:  [mesh.pdf](#) (27.377 KB)



### A short note on illumination formula

By the nature of graphics pipeline, for the simple rendering you'll be implementing in project 2, the fragment shader will generally be unaware whether the corresponding 3D point is in shadow or not. In particular, this could lead to negative dot products  $\text{dot}(\mathbf{N}, \mathbf{L})$  or  $\text{dot}(\mathbf{N}, \mathbf{H})$  popping up in some places. This can lead to multiple problems (e.g. when raising  $\text{dot}(\mathbf{N}, \mathbf{H})$  to a fractional power --  $\text{npow}$  does not have to be an integer! or simply the problem of negative