CS-174A Discussion 1C, Week 5

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@ Discussion 1C Github: https://github.com/NoctisZ/CS174A-1C-2020Fall (https://github.com/NoctisZ/CS174A-1C-2020Fall)

Outline

- Midterm Q&A
- Q&A about Assignment 3

Midterm Q&A

Assginement 3

Shader

- **Shader** is a type of program used in 3D scenes for the production of appropriate levels of light, darkness, and color in a rendered image. It now has more functions than its original purpose and is widely used fields like special effects and video post-processing
- **Flat shading**: lighting is evaluate only once for each polygon
- **Gouraud shading**: lighting is applied to each vertex on a polygon and being linearly interpolated (i.e. bilinear interpolation) over the surface
- **Phong shading**: similar to Gouraud shading, lighting is applied to each vertex first. Then normals are interpolated between the vertices and the lighting is evaluated per-pixel. Thus specular highlights look more natural and precise.