1 Administrivia

Announcements

Take-home exam. When? You’re ready now.

Assignment

Read 6.7–9 (6.1–5).

Do/finish the lab, run lightLab.c with flat shading rather than smooth shading.

From Last Time

Finished Phong light model.

Outline

1. Walk-through of lighting calls in lightLab.c.

2. Lighting lab.
Coming Up

Continuation of lab.

2 Lighting in OpenGL

Pertinent functions (line numbers refer to code handout):

1. `glShadeModel()` (269): GL_SMOOTH, GL_FLAT

2. `glMaterial*()` (271–274):
   (a) Face: GL_BACK, GL_FRONT_AND_BACK
   (b) Parameter name:
      i. Shininess range: 0–128.
      ii. GL_AMBIENT_AND_DIFFUSE
      iii. GL_EMISSION
   (c) Parameter: scalar for shininess, vector for other parameters.

3. `glLight*()` (145, 276–278):
   (a) Light: 8 lights.
   (b) Parameter name: see man page for other names
   (c) Parameter: some scalar, some vector.
      The fourth value in a light’s position.

4. `glEnable()` (280–285):
   (a) GL_LIGHTING
(b) GL_LIGHTx

(c) NORMALIZE

`glDisable()`

These are all modal.

Can turn lighting on and off.

Normal normals and non-normal normals.

3 Hands-On Lab

Grab a copy of `lightLab.c` from class Web page and begin experimenting.