Quiz # 5

CMSC 161: Interactive Computer Graphics

2nd Semester 2014-2015

Institute of Computer Science

University of the Philippines – Los Baños

Lecture by James Carlo Plaras

Give the 3 common types of light sources

Give the 3 lighting model components

Give the 2 types of shading methods

Give one of the surface normal vector of triangle ABC where

$$A = (7,8,9)$$
$$B = (3,2,1)$$
$$C = (1,2,3)$$

Give one of the surface normal vector of triangle ABC where

$$A = (7,8,9)$$
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$$C = (1,2,3)$$

Phong LRM

Light Color Specifications:

- Ambient Light Color (L_a): (0.1, 0.1, 0.1)
- Diffuse Light Color (L_d): (1.0, 1.0, 1.0)
- Specular Light Color (L_s): (1.0, 1.0, 1.0)

Phong LRM

Material Color Specifications :

- Ambient Material Color (K_a): (1.0, 0.0, 0.0)
- Diffuse Material Color (K_d): (1.0, 0.0, 0.0)
- Specular Material Color (K_s): (1.0, 0.82, 0.82)

Phong LRM

Vector and Other Specifications :

- Direction of light to plane (l): <2.0,-3.0, 0.0>
- Normal Vector of plane (n): <0.0, 7.0, 0.0>
- Location of Eye/Camera (E): (4.0, 5.0, 3.0)
- Location of Vertex (F): (3.0, 3.0, 2.0)
- Material Shininess (α): 10.0

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Final Colors:

- Intensity of Ambient Color (I_a) = ?
- Intensity of Diffuse Color (I_d) = ?
- Intensity of Specular Color (I_s) = ?
- Intensity of Final Color (I) = ?