Conan Jennings

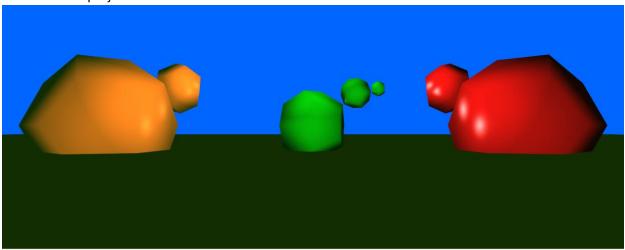
Cej379

Lightshow

Goals: Demonstrate understanding of numerous styles of shading including Phong and BlinnPhong and show them on 3D objects in a realistic manner. We want to be able to interact with the lighting on the objects and see how it changes. The project includes a moveable light source to view its effects on shading as it moves.

Controls: Use the buttons on the screen to adjust the RGB values of the different types of lighting. WASD and the arrow keys control your viewpoint and it can be raised and lowered with shift and control. There is a light source whose position can be adjusted and turned on or off. I was unable to implement the moving headlight portion. You can change between the types of available shading.

Screenshot of project



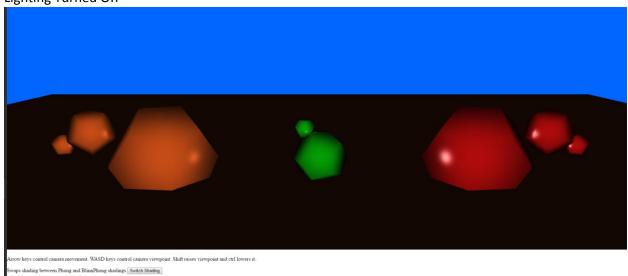
Arrow keys control camera movement. WASD keys control camera viewpoint. Shift raises viewpoint and ctrl lowers it.

Swaps shading between Phong and BlinnPhong shadings Switch Shading

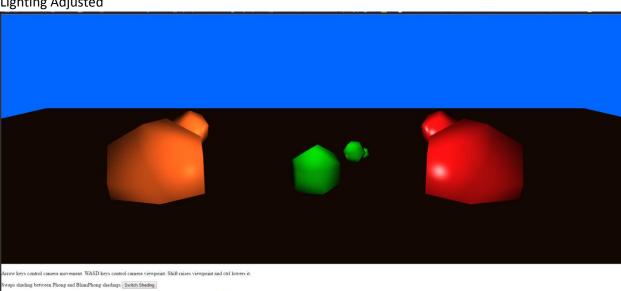
 Adjustable Light
 On/Off
 X+
 X+
 Y+
 Y Z+
 Z Ambient lighting controls:
 R+
 R G+
 G B+
 B

Diffuse lighting controls: R+ R- G+ G- B+ B- Specular lighting controls: R+ R- G+ G- B+ B-

Lighting Turned Off



Lighting Adjusted

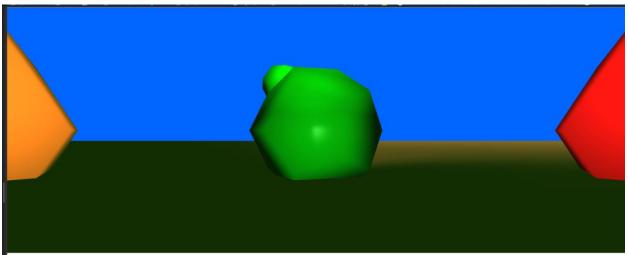


djustable Light: On/Off X+ X- Y+ Y- Z+ Z- Ambient lighting controls: R+ R- G+ G- B+ B-

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Diffuse lighting controls: R+ R- G+ G- B+ B- Specular lighting controls: R+ R- G+ G- B+ B-

Different Shading



Arrow keys control camera movement. WASD keys control camera viewpoint. Shift raises viewpoint and ctrl lowers it.

Swaps shading between Phong and BinnPhong shadings Switch Shading

Adjustable Light: OriOff | X* | X* | Y* | Y* | Z* | Z* Ambient lighting controls: R* | R* | G* | G* | B* | B*

Diffuse lighting controls: R+ R- G+ G- B+ B- Specular lighting controls: R+ R- G+ G- B+ B-