ICG HW1

R08944052 斯曉宇

- Source code:

r08944052_index.html

- Implement:

Flat, Gouraud and Phong shading with Phong reflection model.

- Light source with intensity:

1. Ambient light
2. Right side point light
3. Left side directional light
4. Directional light under objects

- Demo: (Please change input value to see effects)

1. Using Flat shading on “teapot”, demo shows rotation as an example.
2. Using Gouraud shading on “kangaroo”, demo shows translation as an example.
3. Using Phong shading on “easter”, demo shows shear and scale as an example.

- Details

1. Compute shadings with Phong reflection model based on different light positions in a shader and combine them before passing by value to gl_FragColor.
2. Initialize shaders with their id. Then, in drawscene(), use a for loop

executing the following steps:

1) Use an assigned shader program.

2) Set the transformation matrix.

3) Bind buffer corresponding to objects.

3. Pass value by id from <inputs> to transformation matrix.