

Project C: Rocket, Star and Sphere

CS 351

Hao Zhang

hzj943

User's Guide:

Turn on/off light when clicking button.

Switch between Gouraud shading and Phong shading when clicking button.

Turn on/off Blinn-Phong lighting when clicking button.

Change material with user choice.

Change light source location, ambient, diffuse and specular effect with sliders.

Arrow keys aim the camera without moving it: Left/right arrow keys rotate view left/right; up/down arrow keys tilt up/down. WASD keys move the camera without rotating it: W/S keys move forwards/backwards in direction-of-gaze; A/D keys 'strafe' camera left/right at current altitude.

Results:

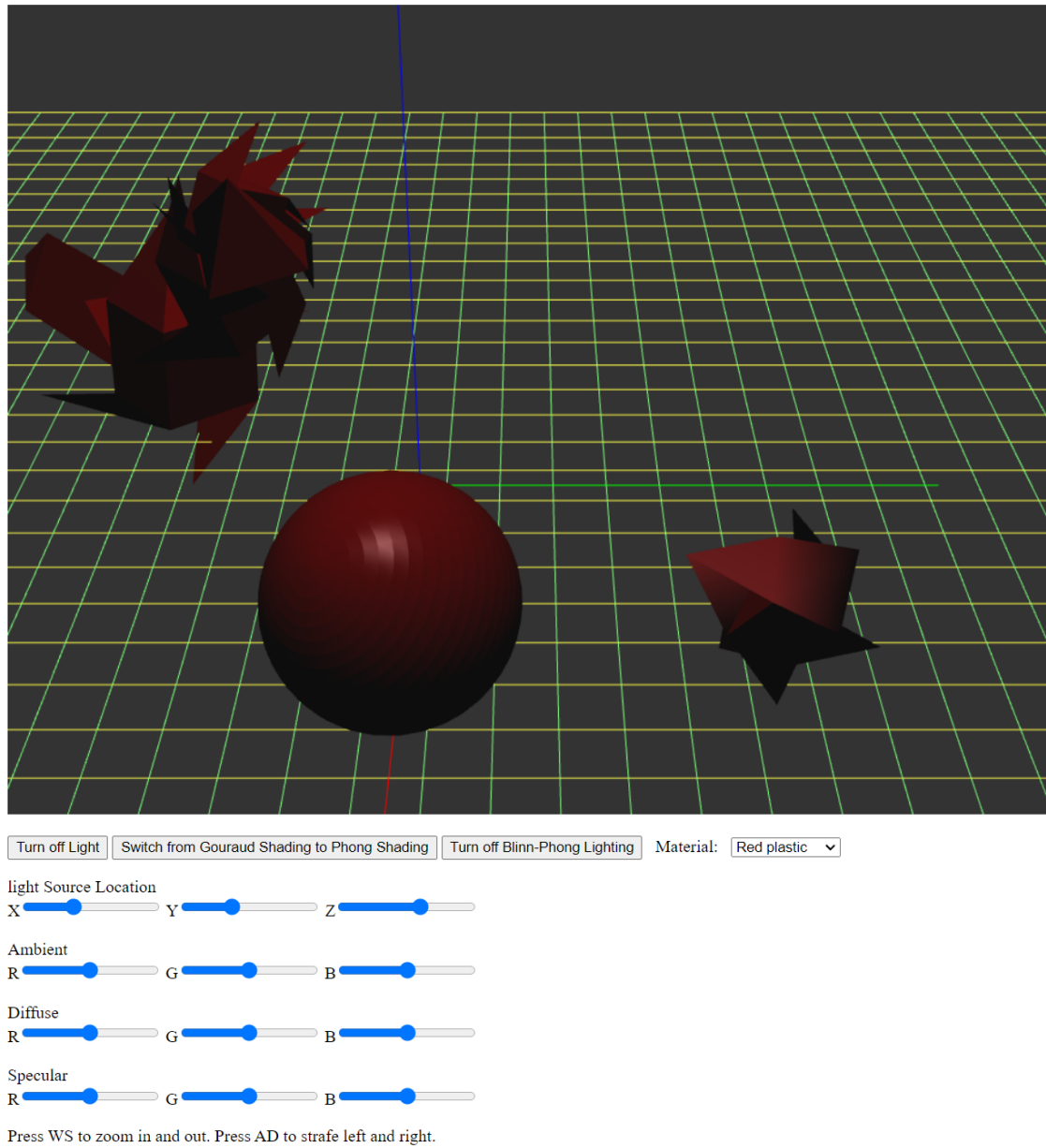


Figure 1 Single Viewport display.

Single-Viewport Display fills top 70% of browser window of any shape. When changing browser window width, canvas will be automatically re-sized to fill the full width of browser window and at exactly (70%) of its height.

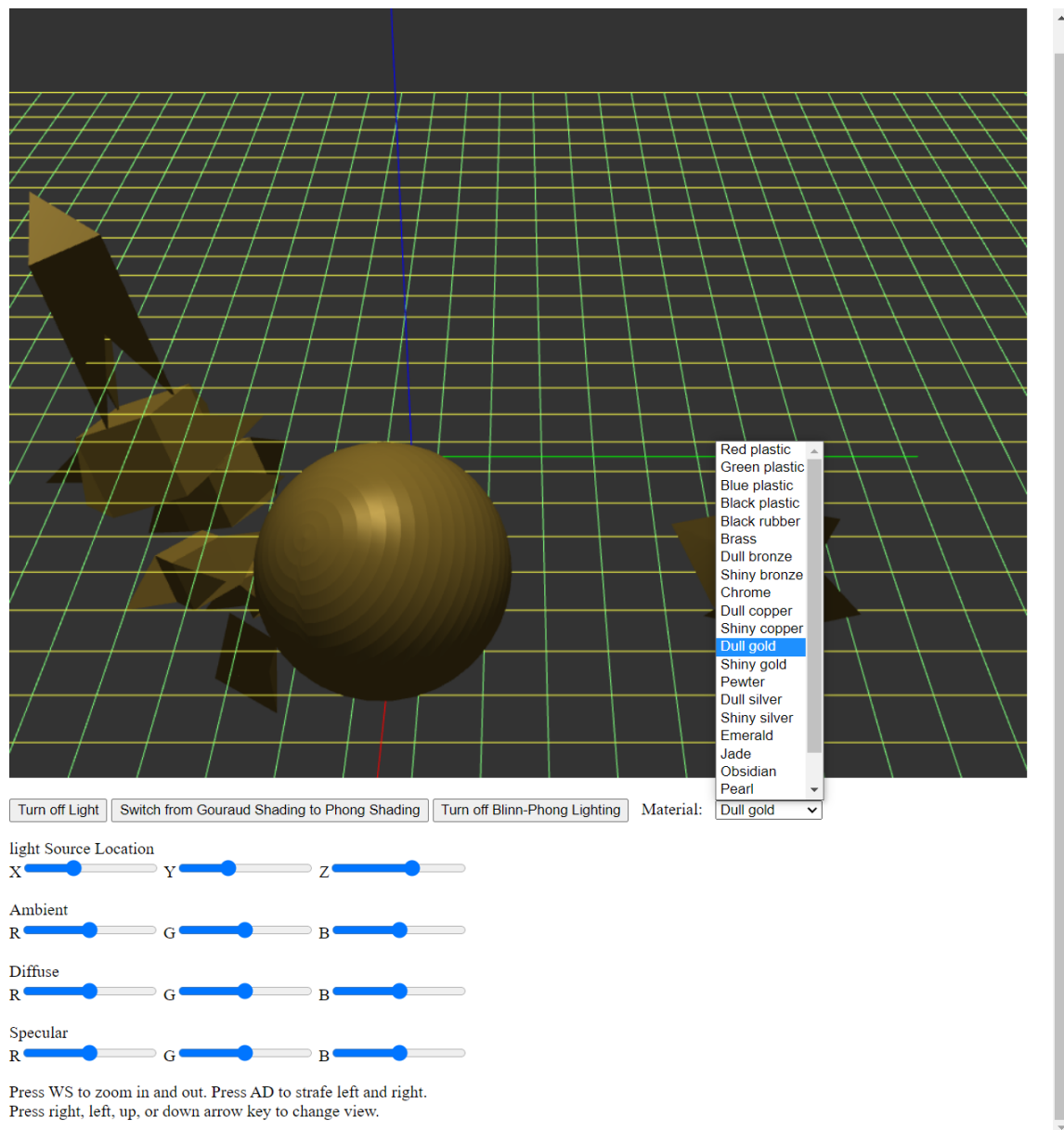


Figure 2 Material Selection.

User can change the material from the drop down menu.

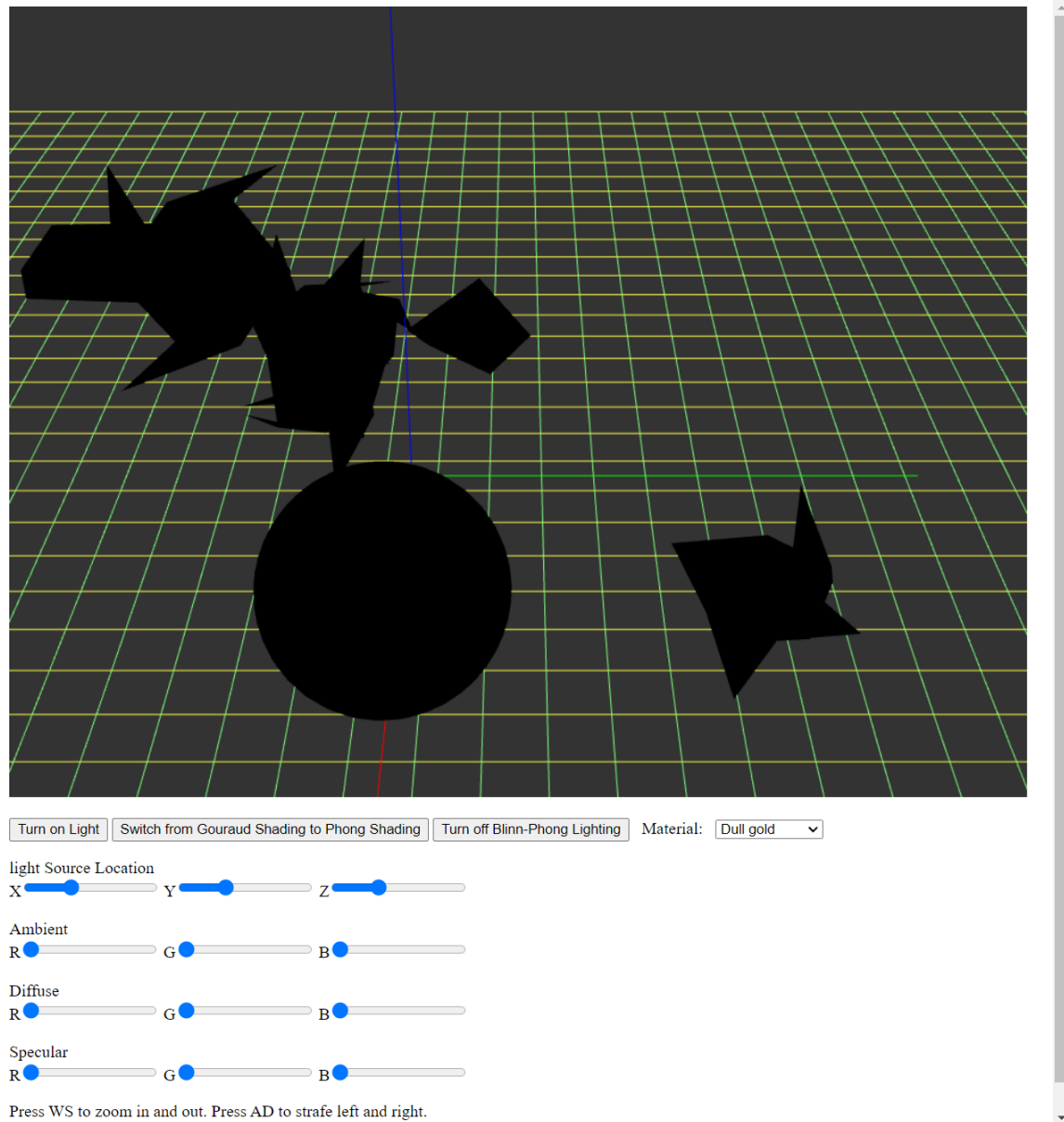


Figure 3 Turning off lighting.

Light can be turn on and off by clicking the first button.

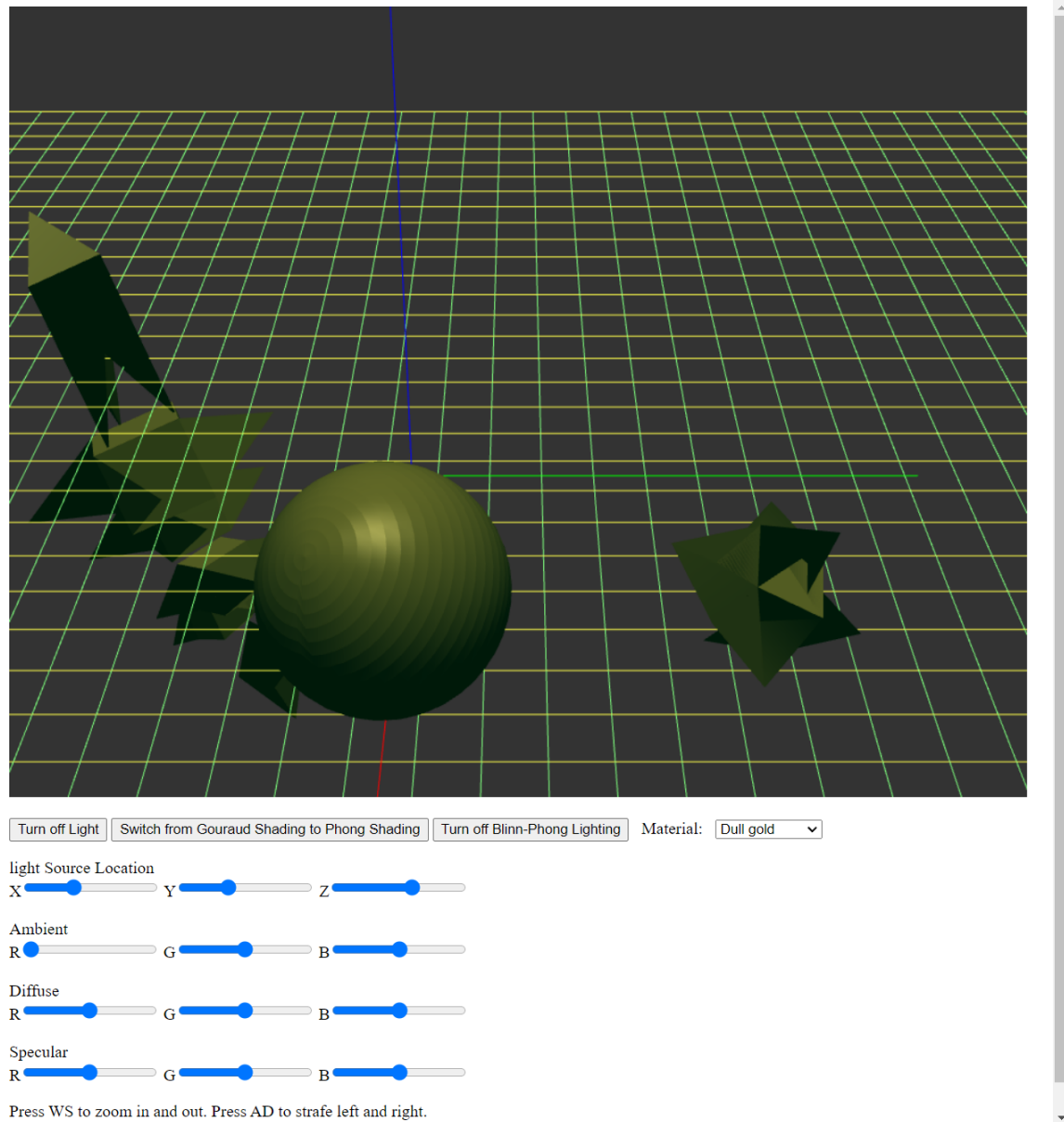


Figure 4 Adjust slide bar.

Change light source location, ambient, diffuse and specular effect with sliders.

Scene Graph:

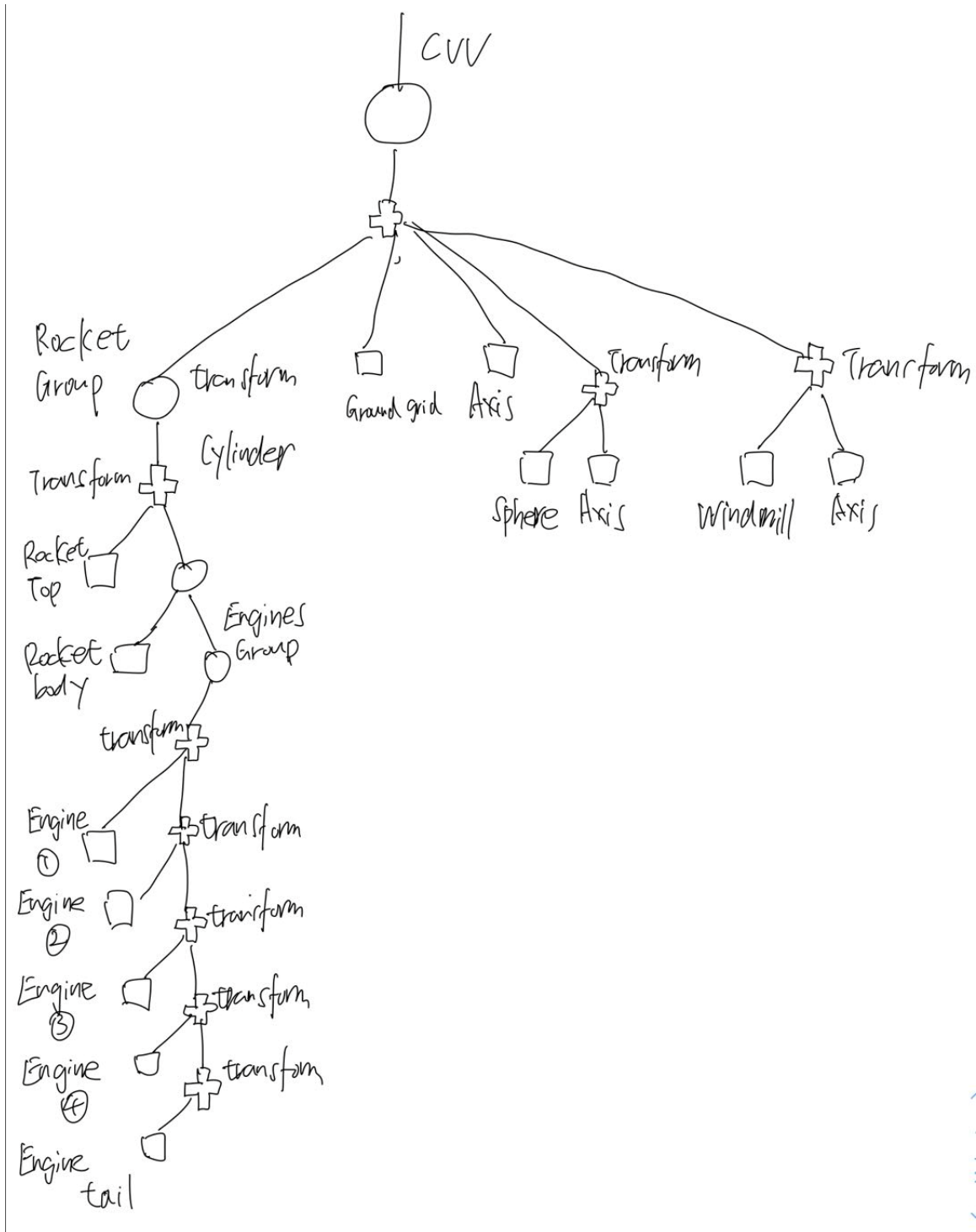


Figure 5 Scene Graph