# Project C: Rocket, Star and Sphere

CS 351

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**User’s Guide:**

Turn on/off light when clicking button.

Switch between Gouraud shading and Phone shading when clicking button.

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

Change material by pressing ‘M’ key.

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 ‘strafes’ camera left/right at current altitude.

**Results:**

Chart

Description automatically generated

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.

Chart

Description automatically generated

Figure 2 Change Material.

User can change the material by pressing ‘M’ key.

Graphical user interface, chart

Description automatically generated

Figure 3 Turning off lighting.

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

Chart

Description automatically generated

Figure 4 Adjust slide bar.

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

**Scene Graph:**

Diagram, schematic

Description automatically generated

Figure 5 Scene Graph