Graphics Visualization - Assignment 1

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1 Let there be light

j) Here is a screenshot of the resulting scene using Phong lighting with specular highlights. The two static lights are positioned at the top left and right behind the camera. The moving light is underneath the pad.
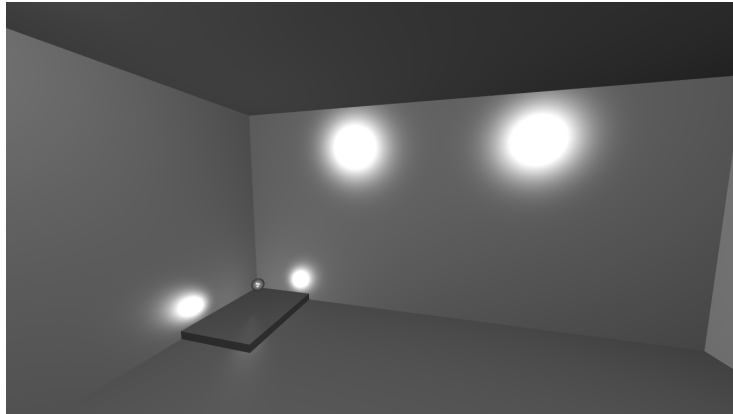

Figure 1: Phong lighting.

2 Sugar and Spice and everything Light

b) The lights are still positioned in the same way. Added dithering to fix banding issues and implemented shadows the same way specified in the exercise.
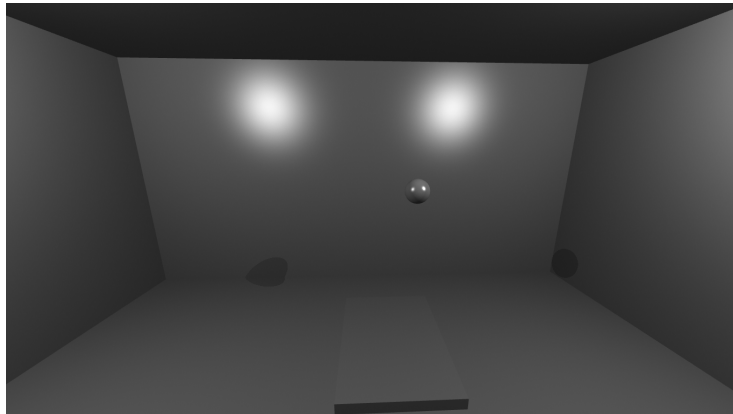

Figure 2: Dithering and shadows.

3 Restoring colour vision

c) Refactored to using a struct for the lights and implemented colors. Here the static lights are positioned close to each other while the moving light is now above the pad. (See task 4 for an example with overlapping shadows)
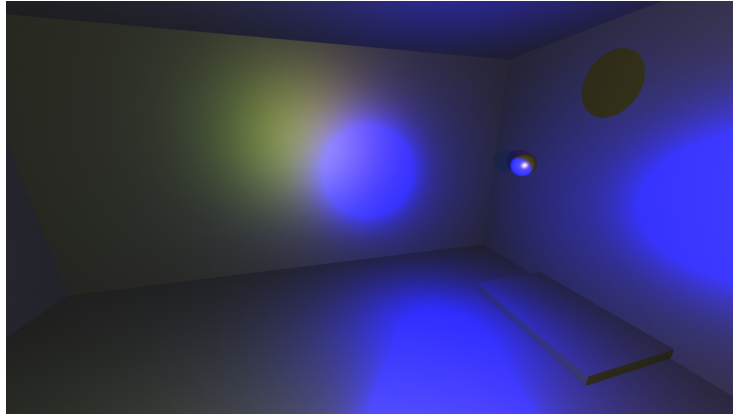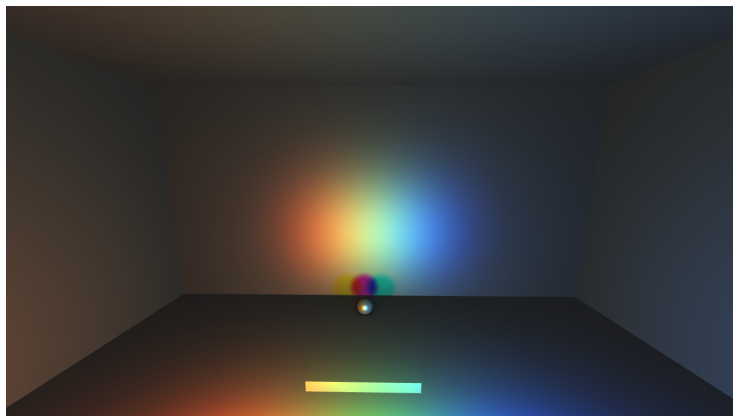

Figure 3: Colours.

4 Getting softer with age

Added soft shadows.

Figure 4: Soft shadows overlapping.