

# COMP 566 Homework 3

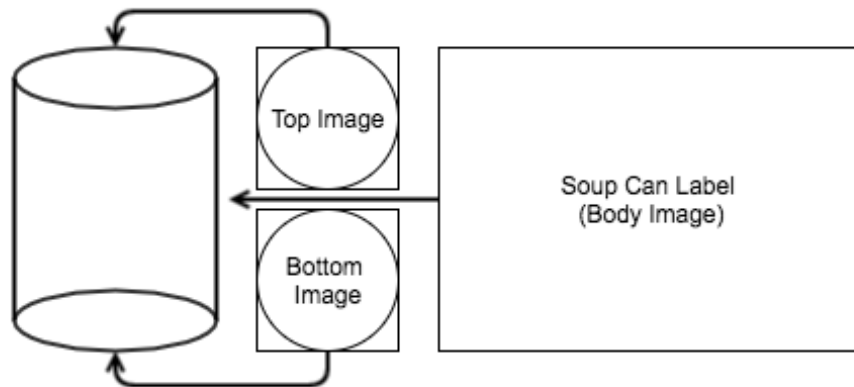
Mark I. Edwards

3/8/16

## Problem 1

We need to draw the cylinder in 3 phases. Once for the top, once for the body, and once for the bottom, with different textures bound each time. See the figure The first quarter of the points will represent the cap, the next half will

Figure 1: Soup Can Textures



represent the body, and the final quarter will represent the bottom. The top and bottom are calculated as shown in Figures 2 and 3. The end results are shown in figures 4, 5, and 6. After considerable effort, consulting with other students, and Professor Claveau, I am still unable to provide any explanation for the offset on the caps. Also the textures are reversed due to a quirk of the bmp loader function.

## Problem 2

Figure 2: Soup Can End

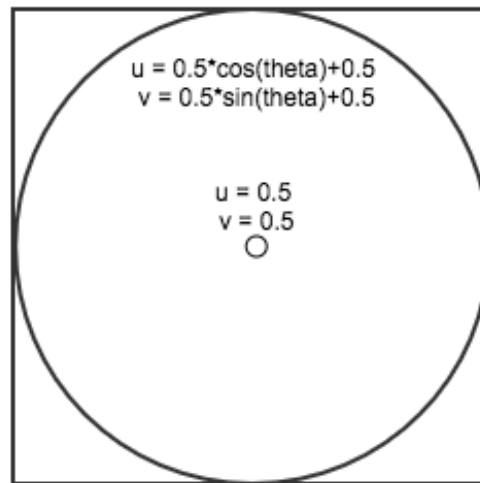


Figure 3: Soup Can Body

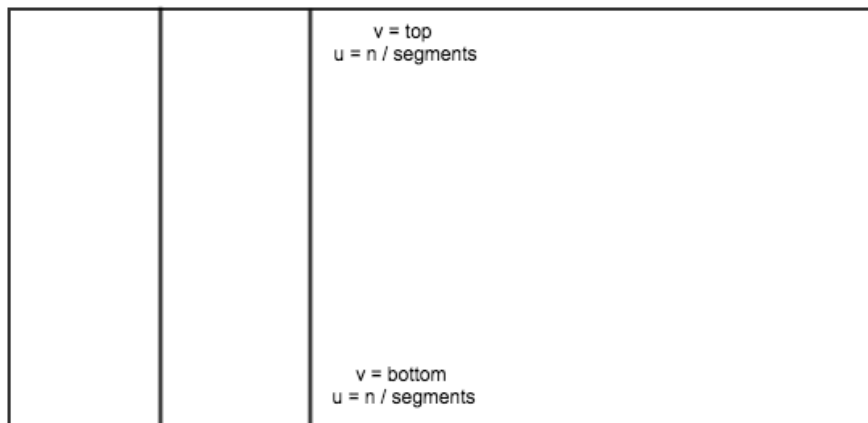


Figure 4: Soup Can Rendered Top



Figure 5: Soup Can Rendered Mid



Figure 6: Soup Can Rendered Bot



Figure 7: The Triangle Imposed Onto the Checkerboard

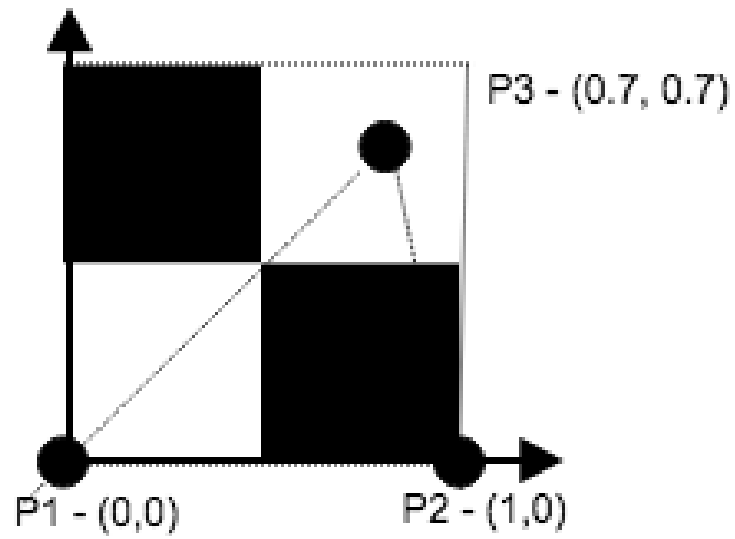


Figure 8: The Triangle Textured

