

Lab 4 - Region Interaction Figures

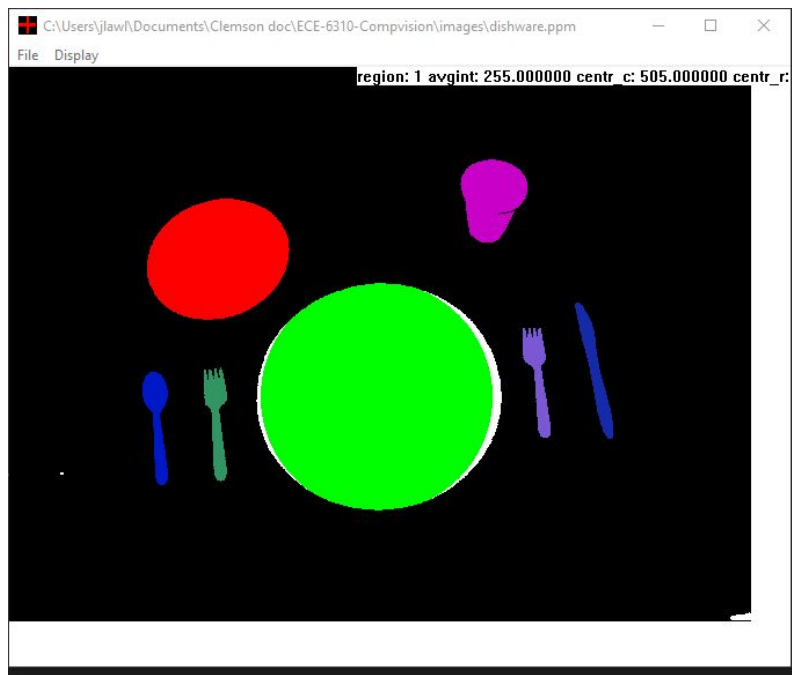


Figure 1: Dishwasher Multi-Color region growth

Figure 1 demonstrates basic region-growing with different colors on a single image. A centroid of 100 was chosen, however, this centroid threshold was not large enough to fill the middle. The printouts at the top right represent the initial pixels intensity and starting location (initial centroid value). These printouts were used to help me figure out where in the program something was going wrong (i.e. checking to make sure the region growth was being performed or not).



Figure 2: Varying Threshold Example 1
Centroid Threshold: 100
Intensity Threshold: 100

The red square here shows that it just about consumes every surrounding pixel since the intensity threshold is really high. I did not let this region finish growing, as it takes a long time for me at least. Notice, however, there are a few pixels that indeed exceed the intensity threshold of 100 and are not painted red.



Figure 3: Variation of Predicates Ex. 2

Centroid: 100

Intensity: 5

Here, I tried to click roughly at the same location as in figure 2. However, because the intensity is so low, it did not expand that far beyond the original color of the pixel initially clicked.



Figure 4: Variation of Predicates Ex. 3

Here I chose varying values of predicates for each color. Green has a centroid threshold of 50 and intensity threshold of 10. Blue is centroid of 10 and intensity of 20. Red selects 25 for both thresholds.

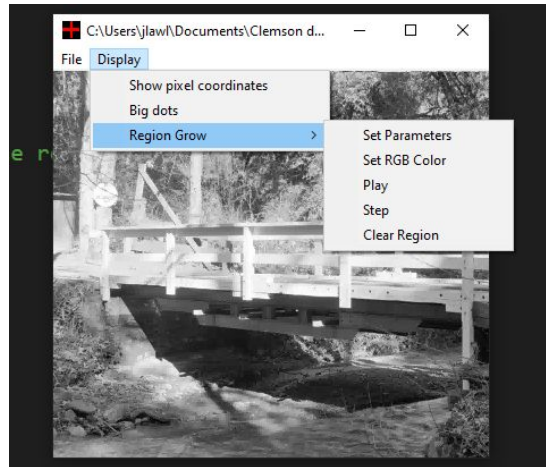


Figure 5: Menu Option Selections

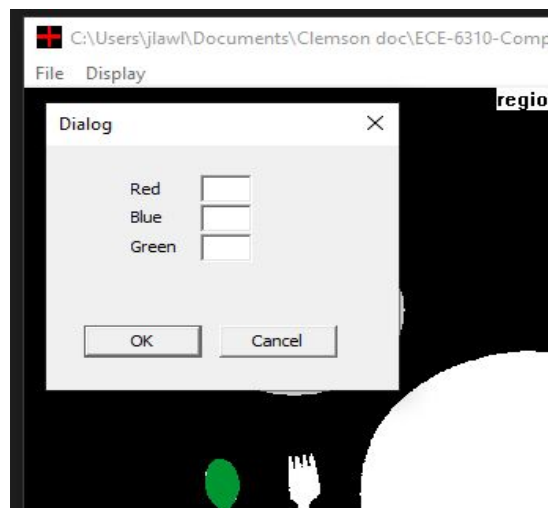


Figure 6: Color Selection Dialog Box

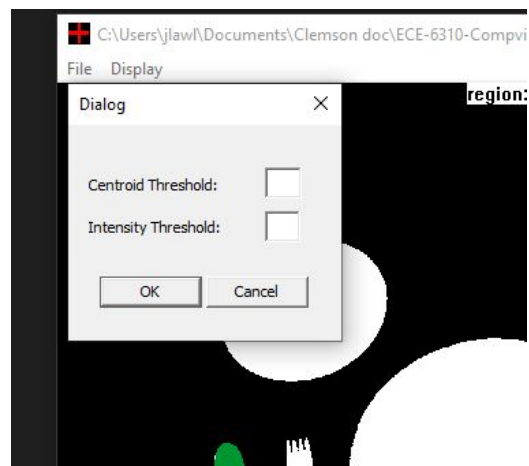


Figure 7: Predicate Dialog Box