Project Progress Report

"Stained-Glass"

Course: COMP 4102
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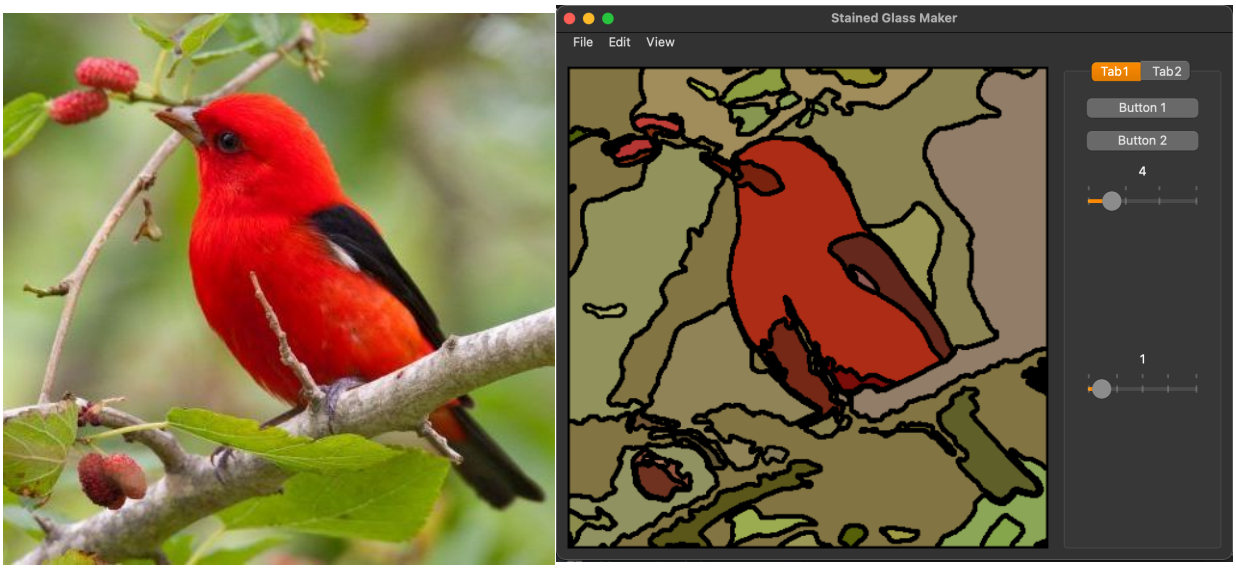
1. Introduction (0.25-0.5 page)

The purpose of this project is to create stained-glass representations of images, and give options for users to customize the processing.



The processing is done by running a k-mean colour clustering on the image, and then collecting the contours of each cluster. Colours are selected by taking the mean colour of the contour, but this process needs to be refined, as the colours seem muted and the blacks are poorly selected. This will likely be changed to a frequency selected. A boost in saturation and lightness might also be considered.

Features for limiting the size of colour regions and smoothing contours will be added.

2. Tasks (0.5-1 page)

List the project tasks that must be completed in order to demonstrate your project. Write "done" in front of a completed task.

Task	Effort/expected effort (in days)	Expected Completion day	Issues
Addition of colour options	1		
Smoothing contours	1		Some shapes are already well made. Might do a check on contour length vs contour area instead of a flat smoothing to all contours.
Additional shape options	0.5		This covers easy options such as line thickness.
Max Area setting	2		Will split contours that are over a certain size. Unsure as of yet on how to decide the split.
Save output Button	1		
Process K-means over subregions	2		K-means does well to locate large scale features, but loses smaller features. Processing the image over subregions allows k-means to identify features without the computational overhead of increasing k.
Abstract colours	2		

3. Show Stoppers (0.5 page)

The core foundation of the project is complete, so there are no show stoppers. The remaining portion of the project are improvements to the workings, but don't include large overhauls.