Oscar Bao

Mini project 2 Report

For this project, I mostly grandfathered in the architecture of the fade example, adding a few variables and changing some constants. To start, I defined how many clock cycles constitute 60 degrees on the color wheel, as I realized the behavior of colors change every 60 degrees, with four possible behaviors: increasing, descending, flat HIGH, flat LOW. I retained all of the pwm code from fade and added a state machine of sorts. At each 60 degree segment, I defined what each color's behavior would be. Since the colors alternate between increasing and decreasing at every 60 degree segment, I fortunately didn't have to change the pwm code at all, just assigning its value to a different color at different segments.

For my GTKwave screen grab, I decided to screen record to show the full cycle. Linked here.

Also, linked here is the video demo. Thank you!