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Project 1

DATE

Problem 1:

The functions I created to handle the filtering of an RGB pixels are the following:

struct rgb\_value\_spec

    rw::Float32

    gw::Float32

    bw::Float32

end

struct hsv\_value\_spec

    h\_degree::Float32

    s::Float32

    v::Float32

end

function filter\_RGB(rgb::RGB{N0f8}, rgb\_value\_spec::rgb\_value\_spec)

    return RGB{N0f8}(rgb.r \* rgb\_value\_spec.rw, rgb.g \* rgb\_value\_spec.gw, rgb.b\*rgb\_value\_spec.bw)

end

function filter\_RGB(rgb::RGB{N0f8}, hsv\_value\_spec::hsv\_value\_spec)

    rgb\_v = convert(RGB{N0f8},HSV(hsv\_value\_spec.h\_degree,hsv\_value\_spec.s,hsv\_value\_spec.v))

    rw = rgb\_v.r / 255.0

    bw = rgb\_v.b / 255.0

    gw = rgb\_v.g / 255.0

    return filter\_RGB(rgb, rgb\_value\_spec(rw,gw,bw))

end

function filter\_RGB(rgb::RGB{N0f8},color\_s::String)

    if(haskey(Colors.color\_names ,color\_s))

        r,b,g = Colors.color\_names[color\_s]

        rw = r / 255.0

        bw = b / 255.0

        gw = g / 255.0

        return filter\_RGB(rgb, rgb\_value\_spec(rw,bw,gw))

    end

end

The creation of the structs are needed as the specfictions are not the actauly pixel values for RGB instead they are the weight of the pixel values.

TO DO LOOK into using rgb value