

CODE

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import PIL
from PIL import Image
from PIL import ImageDraw
from PIL import ImageFont

# read image and convert to RGB
image1=Image.open("readonly/msi_recruitment.gif")
image1=image1.convert('RGB')

# build a list of 9 images which have different brightnesses
#enhancer=ImageEnhance.Brightness(image)
images=[]
labels=[]
for channel in [0,1,2]:
    for intensity in [0.1,0.5,0.9]:
        image=Image.open("readonly/msi_recruitment.gif")
        image=image.convert('RGB')
        for i in range(image.width):
            for j in range(image.height):
                tup=image.getpixel((i,j))
                lst2=[i for i in tup]
                lst2[channel]=int(lst2[channel]*intensity)
                tup2=(lst2[0],lst2[1],lst2[2])
                image.putpixel((i,j),tup2)
        labels.append('channel {} intensity {}'.format(channel,intensity))
        #font_obj=ImageFont.load_default()
        #newi=PIL.Image.new(image.mode,(image.width,image.height+85))
        #newii.text((image.width,image.height),'Channel',fill='white',font=ImageFont.load_default())
        #newi.paste(image,(0,0))
        #newii=ImageDraw.Draw(newi)
        #fnt=ImageFont.truetype('readonly/fanwood-webfont.ttf', 75)
        #newii.text((image.width,image.height-50),'Channel',fill=(0,0,0),font=fnt)
        images.append(image)
# create a contact sheet from different brightnesses
first_image=images[0]
contact_sheet=PIL.Image.new(first_image.mode, (first_image.width*3,first_image.height*3+3*85))
x=0
y=0

fnt=ImageFont.truetype("readonly/fanwood-webfont.ttf",75)
draw=ImageDraw.Draw(contact_sheet)
for i,img in enumerate(images):
    # Lets paste the current image into the contact sheet
    contact_sheet.paste(img, (x, y) )
    draw.text((x,y+first_image.height+5), labels[i], font=fnt)
```

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# Now we update our X position. If it is going to be the width of the image, then we set it to 0
# and update Y as well to point to the next "line" of the contact sheet.
if x+first_image.width == contact_sheet.width:
    x=0
    y=y+first_image.height+85
else:
    x=x+first_image.width

# resize and display the contact sheet
contact_sheet = contact_sheet.resize((int(contact_sheet.width/2),int(contact_sheet.height/2) ))
display(contact_sheet)

```

RESULT

