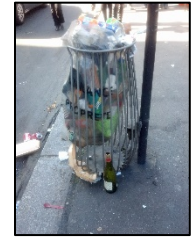


Carter Jeurissen

Completed



Originals



#Carter Jeurissen Finishing March 8 2020

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import random
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def collage():
    picture = makePicture(getMediaPath("Computer.jpg"))
    background = makeEmptyPicture(int(getWidth(picture)*0.2248),
    int(getHeight(picture)*0.2248))
    collagePic = makePicture(getMediaPath("Trash.jpg"))
    collageScaled = makeEmptyPicture(129,159)
    collageBackground = makeEmptyPicture(516,318)
    raccoon = makePicture(getMediaPath("Raccoon Stand.png"))
    bigRaccoon = makeEmptyPicture(int(getWidth(raccoon)*2),
    int(getHeight(raccoon)*2))
    croppedRaccoon = makeEmptyPicture(316,423)
    signature = makePicture(getMediaPath("Signature.jpg"))
    smallSig = makeEmptyPicture(int(getWidth(signature)/5),
    int(getHeight(signature)/5))
    scale(picture,background,4.448)
    scale(collagePic,collageScaled,18.9767)
    scale(raccoon,bigRaccoon,0.5)
    scale(signature,smallSig,5)
    crop(bigRaccoon,croppedRaccoon)
    whiteBG(croppedRaccoon)
    backgroundDarkener(background)
    grayscaledPic = duplicatePicture(collageScaled)
    mirroredPic = duplicatePicture(collageScaled)
    posterizedPic = duplicatePicture(collageScaled)
    lightDarkPic = duplicatePicture(collageScaled)
    colorShiftPic = duplicatePicture(collageScaled)
    negativePic = duplicatePicture(collageScaled)
    linePic = duplicatePicture(collageScaled)
    random1 = random.randint(1,6)
    random2 = random.randint(1,10)
    random3 = random.randint(1,3)
    random4 = random.randint(1,5)
    random5 = random.randint(1,10)
    grayscale(grayscaledPic)
    mirror(mirroredPic,random1)
    posterize(posterizedPic,random2)
    lightDark(lightDarkPic,random3)
    colorShift(colorShiftPic,random4)
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negative(negativePic)
line(linePic,random5)
list = [collageScaled ,grayscaledPic, mirroredPic, posterizedPic, ↵
        lightDarkPic, colorShiftPic, negativePic, linePic]
random.shuffle(list)
copyPic(list[0],collageBackground,0,0)
copyPic(list[1],collageBackground,129,0)
copyPic(list[2],collageBackground,258,0)
copyPic(list[3],collageBackground,387,0)
copyPic(list[4],collageBackground,0,159)
copyPic(list[5],collageBackground,129,159)
copyPic(list[6],collageBackground,258,159)
copyPic(list[7],collageBackground,387,159)
copyPic(collageBackground,background,346,140)
darkenCoon(croppedRaccoon)
copyCoon(background,croppedRaccoon)
sign(smallSig,background)
explore(background)

def whiteBG(croppedRaccoon):
    #White raccoon bg
    for px in getPixels(croppedRaccoon):
        r = getRed(px)
        g = getGreen(px)
        b = getBlue(px)
        if ((r+g+b)==0) or ((r+g+b)/3)>230):
            setColor(px,white)

def crop(bigRaccoon,croppedRaccoon):
    #Crop raccoon
    newX=0
    for x in range(0,316):
        newY=0
        for y in range(0,423):
            color = getColor(getPixel(bigRaccoon,x,y))
            setColor(getPixel(croppedRaccoon,newX,newY),color)
            newY = newY+1
        newX = newX+1

def darkenCoon(croppedRaccoon):
    #darken raccoon
    for px in getPixels(croppedRaccoon):
        x = getX(px)
        y = getY(px)
        if x<210 or y<93:
            if ((getRed(px)+getGreen(px)+getBlue(px))/3 <= 190):
                color = makeDarker(getColor(px))
                setColor(px,color)
        elif x>=210 and y>=93:
            color = makeDarker(getColor(px))
            setColor(px,color)

def copyCoon(background,croppedRaccoon):
    #copy the raccoon
    backX = 682
    for x in range(0,316):
        backY = 176

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for y in range (0,423):
    pixel = getPixel(croppedRaccoon,x,y)
    if ((getRed(pixel)+getGreen(pixel)+getBlue(pixel))/3 <= 157):
        color = getColor(pixel)
        setColor(getPixel(background,backX,backY),color)
        backY = backY+1
    else:
        backY = backY+1
backX = backX+1

def sign(smallSig,background):
    #Signature signer
    backX = 0
    for x in range(0,getWidth(smallSig)):
        backY = 0
        for y in range(0,getHeight(smallSig)):
            pixel = getPixel(smallSig,x,y)
            if ((getRed(pixel)+getGreen(pixel)+getBlue(pixel))/3 <= 150):
                color = getColor(pixel)
                setColor(getPixel(background,backX,backY),color)
                backY = backY+1
            else:
                backY = backY+1
        backX = backX+1

def scale(picture,background,scale):
    #scale images
    inx = 0
    for x in range(0,getWidth(background)):
        iny = 0
        for y in range(0,getHeight(background)):
            color = getColor(getPixel(picture,int(inx),int(iny)))
            setColor(getPixel(background,x,y),color)
            iny = iny + scale
            inx = inx + scale

def backgroundDarkener(background):
    #darken desk
    for px in getPixels(background):
        x = getX(px)
        y = getY(px)
        if (x < 346) or (x > 860):
            color = getColor(px)
            color = makeDarker(color)
            setColor(px,color)
        if (346 <= x <= 860) and ((y < 140) or (y > 458)):
            color = getColor(px)
            color = makeDarker(color)
            setColor(px,color)

def grayscale(grayscaledPic):
    #Pic alter 1. Grayscale
    for px in getPixels(grayscaledPic):
        intensity = (getRed(px)+getGreen(px)+getBlue(px))/3
        setColor(px,makeColor(intensity,intensity,intensity))

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def mirror(mirroredPic, random1):
    #pic alter 2. Mirror
    width = getWidth(mirroredPic)
    height = getHeight(mirroredPic)
    if (random1 <= 3):
        mirrorPoint = width/2
        for y in range(0,height):
            for x in range(0,mirrorPoint):
                left = getPixel(mirroredPic,x,y)
                right = getPixel(mirroredPic,width - x - 1,y)
                color = getColor(left)
                setColor(right,color)
    elif (random1 > 3):
        mirrorPoint = height/2
        for x in range(0,width):
            for y in range(0,mirrorPoint):
                top = getPixel(mirroredPic,x,y)
                bottom = getPixel(mirroredPic,x,height-y-1)
                color = getColor(top)
                setColor(bottom,color)

def posterize(posterizedPic, random2):
    #pic alter 3. Posterize
    for px in getPixels(posterizedPic):
        r = getRed(px)
        g = getGreen(px)
        b = getBlue(px)
        luminance = (r+g+b)/3
        if random2==1:
            if luminance < 100:
                setColor(px,black)
            else:
                setColor(px,cyan)
        if random2==2:
            if luminance < 168:
                setColor(px,red)
            else:
                setColor(px, magenta)
        if random2==3:
            if luminance < 59:
                setColor(px,green)
            else:
                setColor(px, orange)
        if random2==4:
            if luminance < 97:
                setColor(px,pink)
            elif luminance > 204:
                setColor(px,yellow)
            else:
                setColor(px,blue)
        if random2==5:
            if luminance < 150:
                setColor(px,gray)
            elif luminance > 199:
                setColor(px,white)
            else:
                setColor(px,black)

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if random2==6:
    if luminance < 100:
        setColor(px,green)
    elif luminance > 163:
        setColor(px,cyan)
    else:
        setColor(px,orange)
if random2==7:
    if luminance < 75:
        setColor(px,red)
    elif luminance > 150:
        setColor(px,black)
    else:
        setColor(px,white)
if random2==8:
    if luminance < 80:
        setColor(px,red)
    elif luminance > 200:
        setColor(px,orange)
    elif luminance > 115 and luminance < 155:
        setColor(px,pink)
    else:
        setColor(px,blue)
if random2==9:
    if luminance < 100:
        setColor(px,blue)
    elif luminance > 180:
        setColor(px,cyan)
    elif luminance > 120 and luminance < 140:
        setColor(px,black)
    else:
        setColor(px,green)
if random2==10:
    if luminance < 50:
        setColor(px,black)
    elif luminance > 210:
        setColor(px,white)
    elif luminance > 100 and luminance < 175:
        setColor(px,gray)
    else:
        setColor(px,red)

def lightDark(lightDarkPic,random3):
    #pic alter 4. light and darken
    for px in getPixels(lightDarkPic):
        x = getX(px)
        y = getY(px)
        color = getColor(px)
        if random3==1:
            halfPoint=getWidth(lightDarkPic)/2
            if x < halfPoint:
                color = makeDarker(color)
                setColor(px,color)
            else:
                color = makeLighter(color)
                setColor(px,color)
        if random3==2:

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    halfPoint=getWidth(lightDarkPic)/2
    if x < halfPoint:
        color = makeLighter(color)
        setColor(px,color)
    else:
        color = makeDarker(color)
        setColor(px,color)
if random3==3:
    halfPoint=getHeight(lightDarkPic)/2
    if y < halfPoint:
        color = makeDarker(color)
        setColor(px,color)
    else:
        color = makeLighter(color)
        setColor(px,color)
if random3==4:
    halfPoint=getHeight(lightDarkPic)/2
    if y < halfPoint:
        color = makeLighter(color)
        setColor(px,color)
    else:
        color = makeDarker(color)
        setColor(px,color)

def colorShift(colorShiftPic,random4):
    #pic alter 5. Shift colors
    for px in getPixels(colorShiftPic):
        redVal = getRed(px)
        greenVal = getGreen(px)
        blueVal = getBlue(px)
        if random4==1:
            setRed(px,redVal*1.5)
            setGreen(px,greenVal*1.12)
            setBlue(px,blueVal*0.25)
        if random4==2:
            setRed(px,redVal*1.5)
            setGreen(px,greenVal*1.42)
            setBlue(px,blueVal*1.69)
        if random4==3:
            setRed(px,redVal*1.01)
            setGreen(px,greenVal*0.05)
            setBlue(px,blueVal*0.94)
        if random4==4:
            setRed(px,redVal*0.50)
            setGreen(px,greenVal*1.90)
            setBlue(px,blueVal*1.12)
        if random4==5:
            setRed(px,redVal*0.3)
            setGreen(px,greenVal*0.7)
            setBlue(px,blueVal*0.5)

def negative(negativePic):
    #pic alter 6. Negative
    for px in getPixels(negativePic):
        redVal=getRed(px)
        greenVal=getGreen(px)
        blueVal=getBlue(px)

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negativeColor = makeColor(255-redVal,255-greenVal,255-blueVal)
setColor(px,negativeColor)

def luminance(px):
    #used for line drawing
    redVal=getRed(px)
    greenVal=getGreen(px)
    blueVal=getBlue(px)
    return (redVal+greenVal+blueVal)/3

def line(linePic,random5):
    #pic alter 7. line drawing
    for px in getPixels(linePic):
        x = getX(px)
        y = getY(px)
        if y < getHeight(linePic)-1 and x < getWidth(linePic)-1:
            nextPx = getPixel(linePic,x+1,y+1)
            thisLum = luminance(px)
            nextLum = luminance(nextPx)
            if abs(nextLum - thisLum) >= 10:
                if random5==1:
                    setColor(px,blue)
                if random5==2:
                    setColor(px,cyan)
                if random5==3:
                    setColor(px,pink)
                if random5==4:
                    setColor(px,orange)
                if random5==5:
                    setColor(px,magenta)
                if random5==6:
                    setColor(px,black)
                if random5==7:
                    setColor(px,white)
                if random5==8:
                    setColor(px,gray)
                if random5==9:
                    setColor(px,red)
                if random5==10:
                    setColor(px,green)
            if abs(nextLum - thisLum) < 10:
                if random5==1:
                    setColor(px,black)
                if random5==2:
                    setColor(px,white)
                if random5==3:
                    setColor(px,gray)
                if random5==4:
                    setColor(px,red)
                if random5==5:
                    setColor(px,green)
                if random5==6:
                    setColor(px,blue)
                if random5==7:
                    setColor(px,cyan)
                if random5==8:
                    setColor(px,pink)

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    if random5==9:
        setColor(px,orange)
    if random5==10:
        setColor(px,magenta)

def copyPic (picture,newPicture,x,y):
    #copy a pic all together
    width = getWidth(picture)
    height = getHeight(picture)
    oldX = 0
    for newX in range(x, x+width):
        oldY = 0
        for newY in range(y,y+height):
            color = getColor(getPixel (picture,oldX,oldY))
            setColor(getPixel (newPicture,newX,newY), color)
            oldY = oldY + 1
        oldX = oldX + 1
```

↵ means the line is continued on the next line.