## Laura Conrad

## Completed

## Originals















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#Laura Conrad
#Project 2
def collage():
  pic = makePicture(getMediaPath("ChirreRed.jpg"))
  bg = makePicture(getMediaPath("RedIce.jpg"))
  bg2 = makePicture(getMediaPath("Minecraft.jpg"))
  bg3 = makePicture(getMediaPath("Space.jpg"))
  bg4 = makePicture(getMediaPath("Fall.jpg"))
  bg5 = makePicture(getMediaPath("Weather.jpg"))
  Name = makePicture(getMediaPath("Name.jpg"))
  #Each picture was either taken by me or drawn by me
  #Chirre is a character I made, and is the MAIN photo that is manipulated throughout
  #the code.
  #RedIce and Fall are both pictures I took
  #Minecraft and Weather are both screenshots I took. One of an old minecraft world and
  #the other of a radar image from MyRadar.
  #Space and ChirreRed were both drawn by me
  Height = getHeight(pic)
  Width = getWidth(pic)
  Final = makeEmptyPicture(Width, Height)
  Copy(bg, 0, (200), Final)
  Copy(bg2,200,(400),Final)
  Copy(bg3,400,(600),Final)
  Copy(bg4,600,(800),Final)
  Copy(bg5,800,(1000),Final)
  chromakey (pic, Final)
  Poster (pic, 0, 200, 0, Width)
  Reverse (pic, 200, 400, 0, Width)
  Shift (pic, 600, 800, 0, Width)
  grayScale (pic, 800, 1000, 0, Width)
  StrLine (pic, 193, 204)
  StrLine (pic, 393, 404)
  StrLine (pic, 593, 604)
  StrLine (pic, 793, 804)
  #Why call the next few again? I simply wanted to make the sides of the image more
  #interesting. I also thought it looked cool
  Poster (pic, 0, Height, 0, 20)
  Reverse (pic, 0, Height, 0, 20)
  Shift (pic, 0, Height, 0, 20)
  Poster (pic, 0, Height, Width-20, Width)
  Reverse (pic, 0, Height, Width-20, Width)
  Shift (pic, 0, Height, Width-20, Width)
  Sign(Name,pic)
  explore (Name)
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#Each little part of code is below
def chromakey(source,bg):
  for px in getPixels(source):
    x = getX(px)
    y = getY(px)
    if (getRed(px) > 219 \text{ and } getBlue(px) < 42):
      bqpx = qetPixel(bq,x,y)
      bgcol = getColor(bgpx)
      setColor(px,bgcol)
def Sign(source,bg):
  for px in getPixels(source):
    x = getX(px)
    y = getY(px)
    if (\text{getRed}(px) > 200 \text{ and getBlue}(px) > 200 \text{ and getGreen}(px) > 200):
      bgpx = getPixel(bg, x, y)
      bgcol = getColor(bgpx)
       setColor(px,bgcol)
#The reason there are two Chromakey-like functions is because the have different colored
#backgrounds
def Copy(pic, starty, endy, newPicture):
  NewY = starty
  for y in range (starty, endy):
    for x in range(0, getWidth(pic)):
      A = getPixel(pic, x, y)
      B = qetColor(A)
       C = getPixel(newPicture, x, NewY)
       setColor(C,B)
    NewY=NewY+1
def Poster(pic, startx, endx, starty, endy):
  for y in range(startx, endx):
    for x in range(starty,endy):
      p = getPixel(pic, x, y)
      R = getRed(p)
      B = getBlue(p)
      G = getGreen(p)
      if(R < 64):
         setRed(p, 31)
      if (R>63 \text{ and } R<128):
         setRed(p, 95)
       if (R>127 \text{ and } R<192):
         setRed(p, 159)
       if (R>191 \text{ and } R<256):
         setRed(p, 223)
       if(B < 64):
         setBlue(p, 31)
      if (B>63 \text{ and } B<128):
         setBlue(p, 95)
      if (B>127 \text{ and } B<192):
         setBlue(p, 159)
       if (B>191 \text{ and } B<256):
         setBlue(p, 223)
       if(G < 64):
         setGreen(p,31)
       if (G>63 \text{ and } G<128):
         setGreen (p, 95)
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if (G>127 and G<192):

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setGreen (p, 159)
      if (G>191 \text{ and } G<256):
        setGreen (p, 223)
def grayScale(pic, startx, endx, starty, endy):
  for y in range(startx, endx):
    for x in range(starty,endy):
      p = getPixel(pic, x, y)
      intensity = (\text{getRed}(p) + \text{getGreen}(p) + \text{getBlue}(p))/3
      setColor(p,makeColor(intensity, intensity, intensity))
def Reverse(pic, startx, endx, starty, endy):
  for y in range(startx,endx):
    for x in range(starty,endy):
      px = getPixel(pic, x, y)
      Red = getRed(px)
      Green = getGreen(px)
      Blue = getBlue(px)
      negColor = makeColor(255-Red, 255-Green, 255-Blue)
      setColor(px,negColor)
def Shift(pic, startx, endx, starty, endy):
  for y in range(startx, endx):
    for x in range(starty, endy):
      px = getPixel(pic, x, y)
      R = getRed(px)
      G = getGreen(px)
      B = getBlue(px)
      SC = makeColor(G, B, R)
      #SC is Shifted Color
      setColor(px,SC)
def StrLine(pic, Beg, End):
  import random
  NewY = Beg
  NewX = 0
  for y in range (Beg, End):
    for x in range(0, getWidth(pic)):
      if NewX >= getWidth(pic):
        NewX = 0
      C = makeColor(random.randint(0,100), random.randint(100,255), random.randint(70,255))
      D = getPixel(pic, NewX, NewY)
      setColor(D,C)
      if NewX < getWidth(pic):
        NewX = NewX + (random.randint(1,100))
    NewY=NewY+(1)
# StrLine is basically what I like to call my portal effect.
# I wanted Chirre to look like they were falling through different dimensions and being
# effected by said dimension, hence their changed look.
```