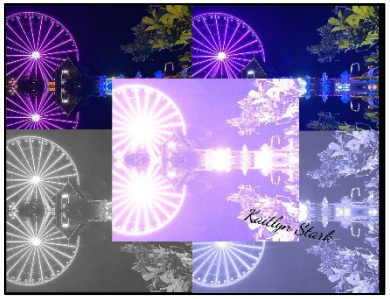
Kaitlyn Stark

Completed



Original

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#Kaitlyn Stark, October 2022
def collage():
  setMediaPath("/Users/kaitlynstark/artshow/")
  picture=makePicture("islandgatlinburg.jpg")
  signature=makePicture("signature.jpg")
  canvas=makeEmptyPicture(1000, 763, black)
  picture1=scale(picture,0.132)
  mirrorHorizontal(picture1)
  copy(picture1, 0, 0,getWidth(picture1),getHeight(picture1),canvas,0,0)
  aestheticPeriwinkle(picture1)
  copy(picture1, 0, 0,getWidth(picture1),getHeight(picture1),canvas,492,2)
  lightenGreyscale(picture1)
  copy(picture1, 0, 0,getWidth(picture1),getHeight(picture1),canvas,1,328)
  aestheticBlue(picture1)
  copy(picture1, 0, 0,getWidth(picture1),getHeight(picture1),canvas,493,332)
  aestheticPurple(picture1)
  copy(picture1, 0, 0,getWidth(picture1),getHeight(picture1),canvas,281,194)
  copySig(signature,canvas,getWidth(canvas)-getWidth(signature),getHeight(canvas)-getHeight(signature))

  explore(canvas)

def copy(source, srcXB, srcYB, srcXE, srcYE, target, targXB, targYB):
  targetX = targXB
  for sourceX in range(srcXB, srcXE):
    targetY = targYB
    for sourceY in range(srcYB, srcYE):
      srcPx = getPixel(source, sourceX, sourceY)
      targPx = getPixel(target, targetX, targetY)
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      setColor(targPx, getColor(srcPx))
      targetY = targetY + 1
    targetX = targetX + 1

def mirrorHorizontal(source):
#Mirror the image from top to bottom
  mirrorPoint=getHeight(source)/2
  height=getHeight(source)
  for x in range(0,getWidth(source)):
    for y in range(0,mirrorPoint):
      topPixel=getPixel(source,x,y)
      bottomPixel=(getPixel(source,x,height-y-1))
      color=getColor(topPixel)
      setColor(bottomPixel,color)

def lightenGreyscale(picture3):
  for pixels in getPixels(picture3):
    red=getRed(pixels)
    green=getGreen(pixels)
    blue=getBlue(pixels)
    lightenedColor=makeColor(50+red,50+blue,50+green)
    setColor(pixels,lightenedColor)
    intensity=((getRed(pixels)+getGreen(pixels)+getBlue(pixels))/3)
    setColor(pixels,makeColor(intensity,intensity,intensity))

def aestheticBlue(picture1):
#Create a blue tint
  for px in getPixels(picture1):
    value=getBlue(px)
    setBlue(px,value*1.8)
    value=getGreen(px)
    setGreen(px,value*1.2)
    value=getRed(px)
    setRed(px,value*1.2)

def aestheticPurple(picture1):
#Create a vibrant purple tint
  for px in getPixels(picture1):
    value=getBlue(px)
    setBlue(px,value*1.8)
    value=getGreen(px)
    setGreen(px,value*1.4)
    value=getRed(px)
    setRed(px,value*1.8)
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def aestheticPeriwinkle(picture1):
#Create a sort of periwinkle tint
  for px in getPixels(picture1):
    value=getBlue(px)
    setBlue(px,value*1.85)
    value=getGreen(px)
    setGreen(px,value*1.4)
    value=getRed(px)
    setRed(px,value*1.2)

def scale(pictIn, factor):
  pictOut = makeEmptyPicture(int(getWidth(pictIn) * factor), int(getHeight(pictIn) * factor))
  inX = 0
  for outX in range(0, int(getWidth(pictIn) * factor)):
    inY = 0
    for outY in range(0, int(getHeight(pictIn) * factor)):
      color = getColor(getPixel(pictIn, int(inX), int(inY)))
      setColor(getPixel(pictOut, outX, outY), color)
      inY = inY + 1.0 / factor
    inX = inX + 1.0 / factor
  return pictOut

def copySig(sPicture,target,targetX,targetY):
#Function used to copy signature onto canvas
  sigColor=makeColor(0,0,0)
  for sX in range(0,getWidth(sPicture)):
    for sY in range(0,getHeight(sPicture)):
      sPx=getPixel(sPicture,sX,sY)
      sColor=getColor(sPx)
      targetPx=getPixelAt(target,sX+targetX,sY+targetY)
      if distance (sigColor,sColor)<200:
        setColor(targetPx,black)

collage()
```