package com.felight.collections;

import java.awt.image.BufferedImage;

import java.io.File;

import java.io.IOException;

import javax.imageio.ImageIO;

public **class Image** {

public boolean colorToGrayScale(String srcFile, String destFile) throws IOException{

File input = new File(srcFile);

if(input.exists() == false){

System.out.println("source file does not exist");

return false;

}

BufferedImage image = ImageIO.read(input);

int width = image.getWidth();

int height = image.getHeight();

for(int y=0; y<height; y++){

for(int x=0; x<width; x++){

int pixel = image.getRGB(x,y);

int red = (pixel>>16)&0xff;

int green = (pixel>>8)&0xff;

int blue = pixel&0xff;

int avg = (red+green+blue)/3;

int newPixel = (avg<<24)|(avg<<16)|(avg<<8)|avg;

image.setRGB(x, y, newPixel);

}

}

File output = new File(destFile);

ImageIO.write(image, "jpg", output);

return true;

}

public void colorToGrayscale(File srcFolder, File destFolder) throws IOException{

if(srcFolder.exists() == false){

System.out.println("Source folder does not exists");

return;

}

File[] files = srcFolder.listFiles();

if(files == null){

System.out.println("srcFolder does not denote directory or some io error occurred");

return;

}

if(destFolder.exists() == false){

destFolder.mkdir();

}

for(int i=0; i<files.length; i++){

colorToGrayScale(files[i].getPath(), destFolder.getPath()+"\\"+files[i].getName()+".jpg");

}

}

}

import java.io.File;

import java.io.IOException;

public **class Effects** {

public static void main(String[] args) {

File srcFolder = new File("d:\\Scr\\");

File destFolder = new File("d:\\grayscale");

Image image = new Image();

try {

image.colorToGrayscale(srcFolder, destFolder);

} catch (IOException e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

}

