Lab 20

Bad Data

1 1 20 30 40 40

0 2 80 80 50 50

1 2 60

0 3 150 200 10 80

1 1 100 100 10 10

Long Bad Data

1 1 20 30 40 40

0 2 80 80 50 50

1 2 60

0 3 150 200 10 80

1 1 100 100 10 10

1 5 10 10 10 10

1 1 200 30 30 10

3 1 220 230 60 15

0 2 40 280 50 25

1 2 60x

0 0 150 200 10 80

1 1 300 300 20 0 10 1 1 300 300 200 10

1 2 250 135 30 45

0 3 80 10 40 20

0 1 220 300 20 25

4 5 150 175 10 10

Rectangle.java

import java.awt.\*;

/\* Rectangle.java

\* Lab 20, COMP160, 2019

\*

\* graphical representation of a rectangle

\* with a fill, colour, x, y, width, height

\*/

public class Rectangle{

private int x; // x location;

private int y; // y location;

private Color shade; // colour of Rectangle

private int width; //width of Rectangle

private int height;//height of Rectangle

private boolean fill; //drawRect false or fillRect true

/\*\*constructor for Rectangle\*/

public Rectangle(boolean fill, Color shade,int x, int y , int width, int height){

this.x = x;

this.y = y;

this.width = width;

this.height = height;

this.shade = shade;

this.fill=fill;

}

/\*\*draw this rectangle

@param g a Graphics object\*/

public void draw(Graphics g){

g.setColor(shade);

if (fill ){

g.fillRect(x, y, width, height);

} else {

g.drawRect(x, y, width, height);

}

}

}

FileApp.java

import javax.swing.\*;

/\*\* FileApp.java

\* Lab 20, COMP160, 2019

\* closely follows the Splat program L,D&C p.974 (837 2nd edition) and the Lab 14 Diner code

\*/

public class FileApp{

/\*\*Creates a JFrame object and adds instance of FilePanel to it\*/

public static void main(String[]args){

JFrame fileFrame = new JFrame();

fileFrame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

fileFrame.getContentPane().add(new FilePanel());

fileFrame.pack();

fileFrame.setVisible(true);

fileFrame.setTitle("File Reading Lab 20");

}

}

FilePanel.java

import java.awt.\*;

import javax.swing.\*;

/\*\* FilePanel.java

\* Lab 20, COMP160, 2019

\*

\* a JPanel which creates 2 instances of Rectangle objects,

\* stores them in an array, and draws them

\*/

public class FilePanel extends JPanel{

private Rectangle[] drawObjects = new Rectangle [10];

private int count;

/\*\*constructor instantiates 6 Rectangle objects\*/

public FilePanel(){

drawObjects[count] = new Rectangle(true,Color.red, 0, 0,30,30);

count++;

drawObjects[count] = new Rectangle(false,Color.blue, 50, 50,30,30);

count++;

setPreferredSize(new Dimension(300,300));

setBackground(Color.yellow);

}

/\*\*each Rectangle will draw itself\*/

public void paintComponent(Graphics g){

super.paintComponent(g);

for(int i = 0; i < count; i++){

drawObjects[i].draw(g);

}

}

}