Team Ganymede: Assignment 1
Preamble

Actual LOC:
Main Method: 2
Start Method: 60

Estimated LOC at completion:
Main Method: 10
Start Method: 200
Total Effort: 100-200

Main Method:
Raena: 1 minute
Anh: 10 minute
Start Method:
Raena: 3 hours
Anh: 3 hours
The Assignment
The Ambient product is currently a JavaFX app that shows a black rectangle upon first usage. When the sliders are moved, the box changes colors according to the mixes of the RBG. The brightness of the box will change depending on the value.
Brightness Guide
Dim: Any value between 0 and 66
Regular: Any Value between 66 and 150
Bright: Any Value between 150 and 255

Code

```
import java.io.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.event.*;
import javax.swing.JTextField;


public class Ambient extends JFrame {

  JSlider redSlider, greenSlider, blueSlider, opacitySlider;
  JLabel redLabel, greenLabel, blueLabel, opacityLabel, string;
  JPanel colorPanel, sliders, labels;
  //JTextField input= new JTextField("Enter Valuesfrom 0-99", 30);
```

```
//tried to make text work but ran out of time

public Ambient(){
   redSlider = new JSlider(JSlider.HORIZONTAL, 0, 255, 0); //change last vaule to user input
   greenSlider = new JSlider(JSlider.HORIZONTAL, 0, 255, 0);
   blueSlider = new JSlider(JSlider.HORIZONTAL, 0, 255, 0);
   opacitySlider = new JSlider(JSlider.HORIZONTAL, 0, 255, 255);


   redLabel = new JLabel("Red: 0");
   greenLabel = new JLabel("Green: 0");
   blueLabel = new JLabel("Blue: 0");
   opacityLabel = new JLabel("Brightness: 99");
   string = new JLabel();

   events e = new events();
   redSlider.addChangeListener(e);
   greenSlider.addChangeListener(e);
   blueSlider.addChangeListener(e);
   opacitySlider.addChangeListener(e);


   colorPanel = new JPanel();
   colorPanel.setBackground(Color.BLACK);

   //container that sets everything in a grid

   Container pane = this.getContentPane();
   pane.setLayout(new GridLayout(1, 3, 2, 2));

   sliders = new JPanel();
   labels = new JPanel();

   //pane.add(input);
   pane.add(sliders);
   pane.add(labels);
   pane.add(colorPanel);



   //layout of sliders
   sliders.setLayout(new GridLayout(4, 1, 2, 2));
   sliders.add(redSlider);
   sliders.add(greenSlider);
```

```
    sliders.add(blueSlider);
    sliders.add(opacitySlider);

    //layout of labels
    labels.setLayout(new GridLayout(4, 1, 2, 2));
    labels.add(redLabel);
    labels.add(greenLabel);
    labels.add(blueLabel);
    labels.add(opacityLabel);

  }

  public class events implements ChangeListener{
     public void stateChanged(ChangeEvent e){
        int r =redSlider.getValue();
        int g =greenSlider.getValue();
        int b =blueSlider.getValue();
        int o =opacitySlider.getValue();

        redLabel.setText("Red: " + r); //minus some vaule to get under 99
        greenLabel.setText("Green: " + g);
        blueLabel.setText("Blue: " + b);
        opacityLabel.setText("Brightness: " + o);

        colorPanel.setBackground(new Color(r,g,b,o));
     }
  }


   public static void main (String[] args)
    {
       Ambient ambient = new Ambient();
       ambient.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
       ambient.setVisible(true);
       ambient.setTitle("Ambient");
       ambient.setSize(800, 150);
      // ambient.paint(null);
    }


}
```