

```
import java.awt.Color;
import java.awt.Graphics;
public class Mixer
{
    private int red;
    private int green;
    private int blue;
    private int alpha;

    public Mixer(int red, int green, int blue, int alpha)
    {
        this.red = red;
        this.green = green;
        this.blue = blue;
        this.alpha = alpha;
    }

    public void setRed(int red)
    {
        this.red = red;
    }

    public void setGreen(int green)
    {
        this.green = green;
    }

    public void setBlue(int blue)
    {
        this.blue = blue;
    }

    public void setAlpha(int alpha)
    {
        this.alpha = alpha;
    }

    public void drawNotAccurate(Graphics g, int w, int h)
    {
        // Dessiner chaque carré coloré dans une des 9 zones (grille de 3x3)
        // Méthode avec des "espaces" entre les carrés colorés
        int w13 = w / 3;           // 1/3 de w
        int h13 = h / 3;           // 1/3 de h
        int w23 = w / 3*2;         // 2/3 de w
        int h23 = h / 3*2;         // 2/3 de h
        int w16 = w / 6;           // 1/6 de w
        int h16 = h / 6;           // 1/6 de h

        g.setColor(new Color(red, 0, 0, alpha));
        g.fillRect(0, 0, w13, h13);
        g.setColor(new Color(red, green, 0, alpha));
        g.fillRect(w13, 0, w13, h13);
        g.setColor(new Color(0, green, 0, alpha));
        g.fillRect(w23, 0, w13, h13);
        g.setColor(new Color(red, 0, blue, alpha));
        g.fillRect(w16, h13, w16, h13);
        g.setColor(new Color(red, green, blue, alpha));
        g.fillRect(w13, h13, w13, h13);
        g.setColor(new Color(0, green, blue, alpha));
        g.fillRect(w23, h13, w16, h13);
        g.setColor(new Color(0, 0, blue, alpha));
        g.fillRect(w13, h23, w13, h13);
    }

    public void draw(Graphics g, int w, int h)
    {
        // Dessiner chaque carré coloré dans une des 9 zones (grille de 3x3)
        int w16 = w / 6;           // 1/6 de w
        int h16 = h / 6;           // 1/6 de h
        int w13 = 2*w16;           // 1/3 de w
        int h13 = 2*h16;           // 1/3 de h
        int w23 = 4*w16;           // 2/3 de w
        int h23 = 4*h16;           // 2/3 de h

        g.setColor(new Color(red, 0, 0, alpha));
        g.fillRect(0, 0, w13, h13);
        g.setColor(new Color(red, green, 0, alpha));
        g.fillRect(w13, 0, w13, h13);
        g.setColor(new Color(0, green, 0, alpha));
        g.fillRect(w23, 0, w13, h13);
        g.setColor(new Color(red, 0, blue, alpha));
        g.fillRect(w16, h13, w16, h13);
        g.setColor(new Color(red, green, blue, alpha));
        g.fillRect(w13, h13, w13, h13);
        g.setColor(new Color(0, green, blue, alpha));
        g.fillRect(w23, h13, w16, h13);
        g.setColor(new Color(0, 0, blue, alpha));
        g.fillRect(w13, h23, w13, h13);
    }
}
```

```
import java.awt.Color;
import java.awt.Graphics;
public class DrawPanel extends javax.swing.JPanel
{
    private Mixer mixer = null;

    public void setMixer(Mixer mixer)
    {
        this.mixer = mixer;
    }

    public DrawPanel()
    {
        initComponents();
    }

    protected void paintComponent(Graphics g)
    {
        int w = getWidth();
        int h = getHeight();

        // Peindre l'arrière fond
        g.setColor(Color.WHITE);
        g.fillRect(0, 0, w, h);

        // Dessiner les lignes diagonales
        g.setColor(Color.BLACK);
        int nbr = 20;
        double diagWidth = (double) w / nbr;
        double diagHeight = (double) h / nbr;

        for (int i = 0; i < nbr; i++)
        {
            int x1 = (int) (i * diagWidth);
            int y1 = (int) (i * diagHeight);
            int x2 = (int) ((nbr - i) * diagWidth);
            int y2 = (int) ((nbr - i) * diagHeight);

            // Ligne haut --> gauche
            g.drawLine(x1, 0, 0, y1 - 1);
            // Ligne bas --> droite
            g.drawLine(x1, h - 1, w - 1, y1 - 1);
            // Ligne haut --> droite
            g.drawLine(x1, 0, w - 1, y2 - 1);
            // Ligne gauche --> bas
            g.drawLine(0, y1, x2 - 1, h - 1);
        }

        // Dessiner les rectangles colorés
        if (mixer != null)
            mixer.draw(g, w, h);
    }
}
// Skipped: ... initComponents { ... }
// Variables declaration - do not modify//GEN-BEGIN:variables
// End of variables declaration//GEN-END:variables
```

```
public class MainFrame extends javax.swing.JFrame
{
    // on démarre avec des valeurs par défaut
    private Mixer mixer = new Mixer(0, 0, 0, 0);

    public MainFrame()
    {
        initComponents();
        drawPanel.setMixer(mixer);
        updateView();
    }

    private void updateView()
    {
        mixer.setRed(redSlider.getValue());
        mixer.setGreen(greenSlider.getValue());
        mixer.setBlue(blueSlider.getValue());
        mixer.setAlpha(alphaSlider.getValue());
        repaint();
    }
    // Skipped: ... initComponents { ... }
    private void redSliderStateChanged(javax.swing.event.ChangeEvent evt) { //GEN-FIRST:event_redSliderStateChanged
        updateView();
    } //GEN-LAST:event_redSliderStateChanged

    private void greenSliderStateChanged(javax.swing.event.ChangeEvent evt) { //GEN-FIRST:event_greenSliderStateChanged
        updateView();
    } //GEN-LAST:event_greenSliderStateChanged

    private void blueSliderStateChanged(javax.swing.event.ChangeEvent evt) { //GEN-FIRST:event_blueSliderStateChanged
        updateView();
    } //GEN-LAST:event_blueSliderStateChanged

    private void alphaSliderStateChanged(javax.swing.event.ChangeEvent evt) { //GEN-FIRST:event_alphaSliderStateChanged
        updateView();
    } //GEN-LAST:event_alphaSliderStateChanged

    /**
     * @param args the command line arguments
     */
    public static void main(String args[])
    {
        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable()
        {
            public void run()
            {
                new MainFrame().setVisible(true);
            }
        });
    }

    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JSlider alphaSlider;
    private javax.swing.JSlider blueSlider;
    private DrawPanel drawPanel;
    private javax.swing.JSlider greenSlider;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JPanel jPanel1;
    private javax.swing.JSlider redSlider;
    // End of variables declaration//GEN-END:variables
}
```