**KOMPUTER GRAFIK (2 SKS)**

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* src\main\java\com\pertemuan2\latgui\Animasi2D.java

package com.pertemuan2.latgui;

import javax.swing.**\***;

import java.awt.**\***;

import java.awt.event.**\***;

public class Animasi2D extends JPanel implements ActionListener {

    private int x = 50, y = 50;

    private int speedX = 2, speedY = 2;

    private int rectX = 150, rectY = 100;

    private int rectSpeedX = 2, rectSpeedY = 2;

    private Timer timer;

    public Animasi2D() {

        setPreferredSize(new Dimension(800, 600));

        setBackground(Color.BLACK);

        timer = new Timer(10, **this**);

        timer.start();

    }

    @Override

    protected void paintComponent(Graphics *g*) {

**super**.paintComponent(*g*);

*g*.setColor(Color.WHITE);

*g*.drawString("SpeedX: " + speedX, 10, 40);

*g*.drawString("SpeedY: " + speedY, 10, 60);

*g*.drawString("Ball X: " + x, 10, 80);

*g*.drawString("Ball Y: " + y, 10, 100);

*g*.drawString("Rect X: " + rectX, 10, 120);

*g*.drawString("Rect Y: " + rectY, 10, 140);

*g*.setColor(Color.RED);

*g*.fillOval(x, y, 50, 50);

*g*.setColor(Color.BLUE);

*g*.fillRect(rectX, rectY, 50, 50);

    }

    @Override

    public void actionPerformed(ActionEvent *e*) {

        x += speedX;

        y += speedY;

        if (x < 0 || x > getWidth() - 50) {

            speedX = -speedX;

        }

        if (y < 0 || y > getHeight() - 50) {

            speedY = -speedY;

        }

        rectX += rectSpeedX;

        rectY += rectSpeedY;

        if (rectX < 0 || rectX > getWidth() - 50) {

            rectSpeedX = -rectSpeedX;

        }

        if (rectY < 0 || rectY > getHeight() - 50) {

            rectSpeedY = -rectSpeedY;

        }

        if (x + 50 > rectX && x < rectX + 50 && y + 50 > rectY && y < rectY + 50) {

            speedX = -speedX;

            speedY = -speedY;

            rectSpeedX = -rectSpeedX;

            rectSpeedY = -rectSpeedY;

        }

        repaint();

    }

    public static void main(String[] *args*) {

        JFrame frame = new JFrame("Animasi 2D");

        Animasi2D animasi = new Animasi2D();

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

        frame.add(animasi);

        frame.pack();

        frame.setVisible(true);

    }

}

OUTPUT



LINK Video = <https://github.com/Xnuvers007/Kuliah/tree/master/semester%206/komputer%20grafik/latihangui/LatGui/src/main/java/com/pertemuan2/latgui/videoanimasi2d>



