**LAPORAN PRAKTIKUM**

**BAHASA PEMROGRAMAN 1**

(**DOSEN PENGAMPU : DEDE HUSEN., M.KOM)**

**Modul 2**



DISUSUN OLEH :

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**2024**

**PRE TEST**

1. Tuliskan bentuk umum stuktur program applet java

Jawab : Struktur umum program Java terdiri dari empat bagian, yaitu: Deklarasi package, Import library, Bagian class, Method main.

**PRAKTIKUM**

/\*

\* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license

\* Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Applet.java to edit this template

\*/

import java.applet.Applet;

import java.awt.\*;

/\*\*

\*

\* @author Suci Indah Lestari

\*/

public class Applet\_M2\_P1 extends Applet {

/\*\*

\* Initialization method that will be called after the applet is loaded into

\* the browser.

\*/

public void init() {

// TODO start asynchronous download of heavy resources

}

public void paint(Graphics g){

Font f = new Font("Comic Sans MS", Font.BOLD, 20);

g.setFont(f);

g.setColor(Color.red);

int xPusat = this.getSize().width/2;

int yPusat = this.getSize().height/2;

String s = "Ayo Belajar Java Applet!!";

FontMetrics fm = this.getFontMetrics(f);

int posisiX = xPusat - (fm.stringWidth(s)/2);

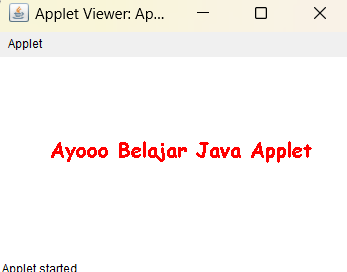
g.drawString("Ayooo Belajar Java Applet", posisiX, yPusat);

}

// TODO overwrite start(), stop() and destroy() methods

}

**Hasil RUN**



**POSTTES**

1. **Buat file applet baru dengan nama BP1\_M2\_PostTest1\_Nama\_AppleteMouse**

**Code**

/\*

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\*/

import java.applet.Applet;

import java.awt.\*;

import java.awt.event.\*;

public class BP1\_M2\_POSTES1\_Aban\_AppleatMouse extends Applet implements MouseMotionListener {

public void init()

{

addMouseMotionListener(this);

setBackground(Color.blue);

}

public void mouseDragged(MouseEvent me) {

Graphics g=getGraphics();

g.setColor(Color.white);

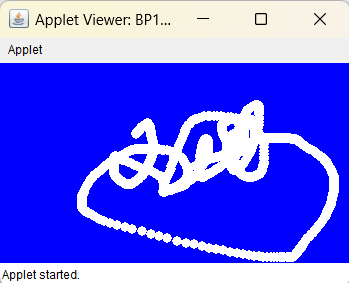
g.fillOval(me.getX(),me.getY(),10,10);

}

public void mouseMoved(MouseEvent me){}

}

**Hasil RUN**



1. **Buat file applet baru dengan nama BP1\_M2\_PostTest2\_Nama\_Applete3D**

**Code**

/\*

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\*/

import java.applet.Applet;

import java.awt.\*;

/\*\*

\*

\* @author Suci Indah Lestari

\*/

public class BP1\_M2\_POSTES2\_Aban\_Appleat3D extends Applet {

@Override

public void paint(Graphics g) {

// Menggambar kubus sederhana

g.drawRect(50, 50, 100, 100); // depan

g.drawRect(80, 80, 100, 100); // belakang

// Menghubungkan titik-titik antara dua kotak untuk membuat efek 3D

g.drawLine(50, 50, 80, 80);

g.drawLine(150, 50, 180, 80);

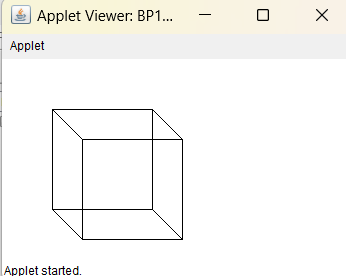
g.drawLine(50, 150, 80, 180);

g.drawLine(150, 150, 180, 180);

}

}

**Hasil RUN**



**Tugas**

1. **Buat file applet baru dengan nama BP1\_M2\_Tugas1\_Nama\_AppletePerhitungan**

**Perhitungan Aritmatika yang terdiri dari (Penjumlahan, Pengurangan, Perkalian, Pembagian)**

**Code**

/\*

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\*/

import java.applet.Applet;

import java.awt.\*;

import java.awt.event.\*;

public class BP1\_M2\_Tugas1\_Aban\_AppletePerhitungan extends Applet implements ActionListener {

TextField num1, num2, result;

Button add, subtract, multiply, divide;

public void init() {

setLayout(new FlowLayout());

Label label1 = new Label("Angka 1:");

num1 = new TextField(10);

Label label2 = new Label("Angka 2:");

num2 = new TextField(10);

add(label1);

add(num1);

add(label2);

add(num2);

add = new Button("+");

subtract = new Button("-");

multiply = new Button("\*");

divide = new Button("/");

add(add);

add(subtract);

add(multiply);

add(divide);

add.addActionListener(this);

subtract.addActionListener(this);

multiply.addActionListener(this);

divide.addActionListener(this);

result = new TextField(15);

result.setEditable(false);

add(new Label("Hasil:"));

add(result);

}

public void actionPerformed(ActionEvent e) {

try {

double number1 = Double.parseDouble(num1.getText());

double number2 = Double.parseDouble(num2.getText());

double hasil = 0.0;

if (e.getSource() == add) {

hasil = number1 + number2;

} else if (e.getSource() == subtract) {

hasil = number1 - number2;

} else if (e.getSource() == multiply) {

hasil = number1 \* number2;

} else if (e.getSource() == divide) {

if (number2 != 0) {

hasil = number1 / number2;

} else {

result.setText("Error: Pembagi nol!");

return;

}

}

result.setText(String.valueOf(hasil));

} catch (NumberFormatException ex) {

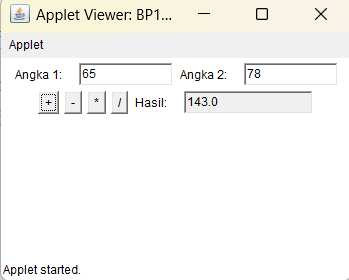
result.setText("Masukkan angka yang valid!");

}

}

}

**Hasil RUN**



1. **Buat file applet baru dengan nama BP1\_M2\_Tugas2\_Nama\_AppleteAnimasi**

**Buat dengan kreasi anda**

**Code**

/\*

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\*/

import java.applet.Applet;

import java.awt.\*;

public class BP1\_M2\_Tugas2\_Aban\_AppleteAnimasi extends Applet implements Runnable {

int x = 0; // Posisi awal lingkaran

int y = 50; // Posisi vertikal lingkaran

Thread animasiThread;

public void init() {

setBackground(Color.green);

animasiThread = new Thread(this);

animasiThread.start();

}

public void paint(Graphics g) {

g.setColor(Color.yellow);

g.fillOval(x, y, 100, 100); // Gambar lingkaran

}

public void run() {

while (true) {

x += 20; // Gerakkan lingkaran ke kanan

if (x > getWidth()) {

x = 0; // Kembali ke awal ketika mencapai batas kanan

}

repaint();

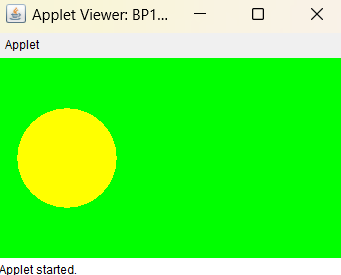
try {

Thread.sleep(10); // Kecepatan animasi

} catch (InterruptedException e) {

e.printStackTrace();

}

 }

}

}

**Hasil RUN**

**Praktek yang di ajarkan oleh pak dede**

**Code nya**

/\*

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\* and open the template in the editor.

\*/

/\*\*

\*

\* @author Suci Indah Lestari

\*/

public class Tugasdaripakdede extends javax.swing.JFrame {

/\*\*

\* Creates new form Tugasdaripakdede

\*/

public Tugasdaripakdede() {

initComponents();

}

/\*\*

\* This method is called from within the constructor to initialize the form.

\* WARNING: Do NOT modify this code. The content of this method is always

\* regenerated by the Form Editor.

\*/

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jLabel3 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

Bill1 = new javax.swing.JTextField();

Bill2 = new javax.swing.JTextField();

ButtonTambah = new javax.swing.JButton();

ButtonKurang = new javax.swing.JButton();

ButtonKali = new javax.swing.JButton();

ButtonBagi = new javax.swing.JButton();

jButton5 = new javax.swing.JButton();

Hasil = new javax.swing.JTextField();

jLabel4 = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

jLabel1.setText("Hasil");

jLabel3.setText("Bilangan 1");

jLabel2.setText("Bilangan 2");

ButtonTambah.setBackground(new java.awt.Color(0, 204, 255));

ButtonTambah.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

ButtonTambah.setText("+");

ButtonTambah.addMouseListener(new java.awt.event.MouseAdapter() {

public void mouseClicked(java.awt.event.MouseEvent evt) {

ButtonTambahMouseClicked(evt);

}

});

ButtonKurang.setBackground(new java.awt.Color(0, 204, 255));

ButtonKurang.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

ButtonKurang.setText("-");

ButtonKurang.addMouseListener(new java.awt.event.MouseAdapter() {

public void mouseClicked(java.awt.event.MouseEvent evt) {

ButtonKurangMouseClicked(evt);

}

});

ButtonKali.setBackground(new java.awt.Color(0, 204, 255));

ButtonKali.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

ButtonKali.setText("X");

ButtonKali.addMouseListener(new java.awt.event.MouseAdapter() {

public void mouseClicked(java.awt.event.MouseEvent evt) {

ButtonKaliMouseClicked(evt);

}

});

ButtonBagi.setBackground(new java.awt.Color(0, 204, 255));

ButtonBagi.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

ButtonBagi.setText(":");

ButtonBagi.addMouseListener(new java.awt.event.MouseAdapter() {

public void mouseClicked(java.awt.event.MouseEvent evt) {

ButtonBagiMouseClicked(evt);

}

});

jButton5.setBackground(new java.awt.Color(0, 255, 255));

jButton5.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

jButton5.setText("Clear");

jButton5.addMouseListener(new java.awt.event.MouseAdapter() {

public void mouseEntered(java.awt.event.MouseEvent evt) {

jButton5MouseEntered(evt);

}

});

jLabel4.setText("Kalkulator Sederhana");

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(58, 58, 58)

.addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED\_SIZE, 102, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(56, 56, 56)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(Bill1, javax.swing.GroupLayout.PREFERRED\_SIZE, 154, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(Bill2, javax.swing.GroupLayout.PREFERRED\_SIZE, 154, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(48, 48, 48)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

.addComponent(ButtonKali, javax.swing.GroupLayout.PREFERRED\_SIZE, 95, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(ButtonTambah, javax.swing.GroupLayout.PREFERRED\_SIZE, 95, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGap(41, 41, 41))

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()

.addContainerGap()

.addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED\_SIZE, 132, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(ButtonKurang, javax.swing.GroupLayout.PREFERRED\_SIZE, 95, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(ButtonBagi, javax.swing.GroupLayout.PREFERRED\_SIZE, 95, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 36, Short.MAX\_VALUE)

.addComponent(jButton5, javax.swing.GroupLayout.PREFERRED\_SIZE, 109, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(layout.createSequentialGroup()

.addComponent(Hasil, javax.swing.GroupLayout.PREFERRED\_SIZE, 207, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(0, 0, Short.MAX\_VALUE)))))

.addContainerGap())

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(60, 60, 60)

.addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED\_SIZE, 108, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addContainerGap(268, Short.MAX\_VALUE)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(144, 144, 144)

.addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED\_SIZE, 132, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addContainerGap(160, Short.MAX\_VALUE)))

);

layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(84, 84, 84)

.addComponent(Bill1, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED\_SIZE, 26, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(Bill2, javax.swing.GroupLayout.PREFERRED\_SIZE, 42, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(41, 41, 41)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(ButtonTambah, javax.swing.GroupLayout.PREFERRED\_SIZE, 61, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(ButtonKurang, javax.swing.GroupLayout.PREFERRED\_SIZE, 61, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGap(28, 28, 28)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(ButtonKali, javax.swing.GroupLayout.PREFERRED\_SIZE, 61, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(ButtonBagi, javax.swing.GroupLayout.PREFERRED\_SIZE, 61, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addGroup(layout.createSequentialGroup()

.addGap(71, 71, 71)

.addComponent(jButton5, javax.swing.GroupLayout.PREFERRED\_SIZE, 88, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addGap(48, 48, 48)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(Hasil, javax.swing.GroupLayout.PREFERRED\_SIZE, 49, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED\_SIZE, 30, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addContainerGap(70, Short.MAX\_VALUE))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(84, 84, 84)

.addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED\_SIZE, 30, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addContainerGap(430, Short.MAX\_VALUE)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(23, 23, 23)

.addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED\_SIZE, 30, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addContainerGap(491, Short.MAX\_VALUE)))

);

pack();

}// </editor-fold>

private void ButtonTambahMouseClicked(java.awt.event.MouseEvent evt) {

// TODO add your handling code here:

double num1 = Double.parseDouble(Bill1.getText());

double num2 = Double.parseDouble(Bill2.getText());

double hasilPenjumlahan = num1 + num2;

Hasil.setText(String.valueOf(hasilPenjumlahan));

}

private void ButtonKurangMouseClicked(java.awt.event.MouseEvent evt) {

// TODO add your handling code here:

double num1 = Double.parseDouble(Bill1.getText());

double num2 = Double.parseDouble(Bill2.getText());

double hasilPengurangan = num1 - num2;

Hasil.setText(String.valueOf(hasilPengurangan));

}

private void ButtonKaliMouseClicked(java.awt.event.MouseEvent evt) {

// TODO add your handling code here:

double num1 = Double.parseDouble(Bill1.getText());

double num2 = Double.parseDouble(Bill2.getText());

double hasilPerkalian = num1 \* num2;

Hasil.setText(String.valueOf(hasilPerkalian));

}

private void ButtonBagiMouseClicked(java.awt.event.MouseEvent evt) {

// TODO add your handling code here:

float num1 = Float.parseFloat(Bill1.getText());

float num2 = Float.parseFloat(Bill2.getText());

float hasilPembagian = num1 / num2;

Hasil.setText(String.valueOf(hasilPembagian));

}

private void jButton5MouseEntered(java.awt.event.MouseEvent evt) {

// TODO add your handling code here:

Bill1.setText("");

Bill2.setText("");

Hasil.setText("");

}

/\*\*

\* @param args the command line arguments

\*/

public static void main(String args[]) {

/\* Set the Nimbus look and feel \*/

//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">

/\* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.

\* For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

\*/

try {

for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {

if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());

break;

}

}

} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Tugasdaripakdede.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Tugasdaripakdede.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Tugasdaripakdede.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Tugasdaripakdede.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

}

//</editor-fold>

/\* Create and display the form \*/

java.awt.EventQueue.invokeLater(new Runnable() {

public void run() {

new Tugasdaripakdede().setVisible(true);

}

});

}

// Variables declaration - do not modify

private javax.swing.JTextField Bill1;

private javax.swing.JTextField Bill2;

private javax.swing.JButton ButtonBagi;

private javax.swing.JButton ButtonKali;

private javax.swing.JButton ButtonKurang;

private javax.swing.JButton ButtonTambah;

private javax.swing.JTextField Hasil;

private javax.swing.JButton jButton5;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JLabel jLabel4;

// End of variables declaration

}

**Hasil RUN**

