

LAPORAN TUGAS PEKAN 8



MATA KULIAH ALGORITMA PEMROGRAMAN

DOSEN PENGAMPU:

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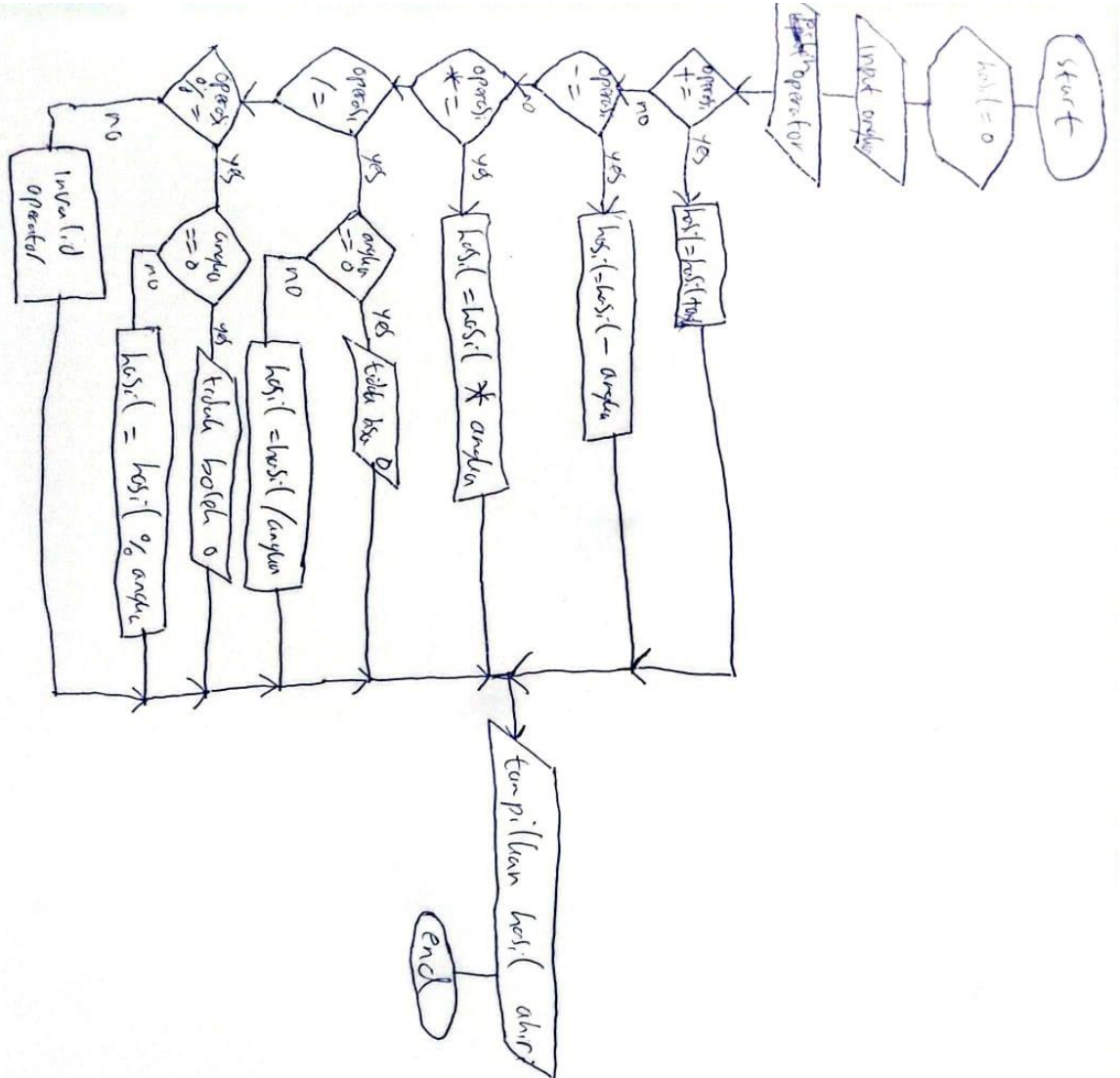
FAKULTAS TEKNOLOGI INFORMASI

DEPARTEMEN INFORMATIKA

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Flowchart



Source Code Beserta Output

```
OperatorAritmatikaGUI_2511532021.java × tugasPekan8_2511532021.java
1 package pekan8_2511532021;
2
3 import java.awt.BorderLayout;
20
21 public class TugasPekan8Assignment_2511532021 extends JFrame {
22     private static final long serialVersionUID = 1L;
23     private JPanel contentPane;
24     private JTextField txtBill;
25     private JTextField txtHasil;
26     private int hasil=0;
27
28
29
30     private void pesanPeringatan(String pesan) {
31         JOptionPane.showMessageDialog(this, pesan, "Peringatan", JOptionPane.WARNING_MESSAGE);
32     }
33     private void pesanError(String pesan) {
34         JOptionPane.showMessageDialog(this, pesan, "Kesalahan", JOptionPane.ERROR_MESSAGE);
35     }
36     /**
37      * Launch the application.
38      */
39     public static void main(String[] args) {
40         EventQueue.invokeLater(new Runnable() {
41             public void run() {
42                 try {
43                     TugasPekan8Assignment_2511532021 frame = new TugasPekan8Assignment_2511532021();
44                     frame.setVisible(true);
45                 } catch (Exception e) {
46                     e.printStackTrace();
47                 }
48             }
49         });
50     }
51
52     /**
53      * Create the frame.
54      */
55     public TugasPekan8Assignment_2511532021() {
56         setTitle("OPERATOR ASSIGNMENT");
57         setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
58         setBounds(100, 100, 394, 295);
59         contentPane = new JPanel();
60         contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
61         setContentPane(contentPane);
62         contentPane.setLayout(null);
63
64         JLabel lblNewLabel = new JLabel("OPERATOR ASSIGNMENT");
65         lblNewLabel.setHorizontalAlignment(SwingConstants.CENTER);
66         lblNewLabel.setFont(new Font("Formula1 Display Bold", Font.PLAIN, 12));
67         lblNewLabel.setBounds(38, 32, 213, 31);
68         contentPane.add(lblNewLabel);
69
70         JLabel lblNewLabel_1 = new JLabel("Angka");
71         lblNewLabel_1.setFont(new Font("Tahoma", Font.PLAIN, 12));
72         lblNewLabel_1.setBounds(10, 73, 78, 31);
73         contentPane.add(lblNewLabel_1);
74
75         JLabel lblNewLabel_1_1 = new JLabel("Operator");
76         lblNewLabel_1_1.setFont(new Font("Tahoma", Font.PLAIN, 12));
77         lblNewLabel_1_1.setBounds(10, 126, 78, 31);
78         contentPane.add(lblNewLabel_1_1);
79
80         JLabel lblNewLabel_1_1_1 = new JLabel("Hasil");
81         lblNewLabel_1_1_1.setFont(new Font("Tahoma", Font.PLAIN, 12));
82         lblNewLabel_1_1_1.setBounds(10, 167, 78, 31);
83         contentPane.add(lblNewLabel_1_1_1);
84
85         txtBill = new JTextField();
86         txtBill.setHorizontalAlignment(SwingConstants.CENTER);
87         txtBill.setBounds(98, 88, 56, 19);
88         contentPane.add(txtBill);
```

```

90
91
92 JComboBox cbOperator = new JComboBox();
93 cbOperator.setModel(new DefaultComboBoxModel(new String[]{"+", "-", "*", "/", "%"}));
94 cbOperator.setBounds(98, 132, 41, 21);
95 contentPane.add(cbOperator);
96
97 txtHasil = new JTextField();
98 txtHasil.setEditable(false);
99 txtHasil.setHorizontalAlignment(SwingConstants.CENTER);
100 txtHasil.setColumns(10);
101 txtHasil.setBounds(98, 174, 56, 19);
102 contentPane.add(txtHasil);
103
104 JButton btnNewButton = new JButton("Proses");
105 btnNewButton.addActionListener(new ActionListener() {
106     int hasil;
107     public void actionPerformed(ActionEvent e) {
108
109         if(txtBill.getText().trim().isEmpty()) pesanPeringatan("Angka harus diisi");
110         else {
111             int nilai;
112             try {
113                 nilai = Integer.parseInt(txtBill.getText().trim());
114                 int op = cbOperator.getSelectedIndex();
115
116                 switch (op) {
117                     case 0: hasil += nilai; break;
118                     case 1: hasil -= nilai; break;
119                     case 2: hasil *= nilai; break;
120                     case 3:
121                         if (nilai == 0) {
122                             JOptionPane.showMessageDialog(null, "Tidak bisa membagi dengan 0!");
123                             return;
124                         }
125                         hasil /= nilai;
126                         break;
127                     case 4:
128                         if (nilai == 0) {
129                             JOptionPane.showMessageDialog(null, "Tidak bisa modulus dengan 0!");
130                             return;
131                         }
132                         hasil %= nilai;
133                         break;
134                 }
135             } catch (NumberFormatException ex) {
136                 pesanError("Input harus berupa angka!");
137             }
138         }
139
140         txtHasil.setText(String.valueOf(hasil));
141     }
142 });
143 btnNewButton.setBounds(166, 132, 63, 21);
144 contentPane.add(btnNewButton);
145
146 }
147
148 }

```

OPERATOR ASSIGNMENT

Angka

Operator

Hasil

Soal : Buat GUI Untuk Operasi Assignment

Program ini bertujuan untuk memvisualisasikan operasi assignment

Judul

GUI untuk Operasi Assignment

Program ini untuk memberikan GUI pada input pengguna yang nantinya akan digunakan untuk operasi Assignment

Deklarasi

Hasil ; integer

Pseudocode

```
1. Hasil = 0
2. Nilai = input("angka 1")
3. Operator = GetOperator()
4.
5. If operator == "+" then
6.   Hasil = hasil + nilai
7.   End if
8.
9. If operator == "-" then
10.  Hasil = hasil - nilai
11.  End if
12.
13.If operator == "*" then
14.  Hasil = hasil * nilai
15.  End if
16.
17.If operator == "/" then
18.  If nilai != 0 then
19.    Hasil = hasil / nilai
20.    End if
21.  Else
22.    Cetak Pembagi tidak boleh 0
23.  End if
24.
25.If operator == "%" then
26.  If nilai != 0 then
27.    Hasil = hasil % nilai
28.    End if
29.  Else
30.    Cetak Pembagi tidak boleh 0
31.  End if
32.
33. Tampilkan hasil
```

