Tugas Pemograman 3

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BAB 1 Daftar Isi

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BAB 2 Kata Pengantar

Puji syukur kami panjatkan kehadirat Allah SWT yang telah memberikan rahmat serta karunia-Nya kepada kami sehingga kami berhasil menyelesaikan Makalah ini yang alhamdulillah tepat pada waktunya yang berjudul “Tugas Pemograman 3”

Makalah ini berisikan tentang informasi tentang Pemograman yang akan penyusun buat atau yang lebih khususnya membahas Pemograman Java,dan lain-lain. Diharapkan Makalah ini dapat memberikan informasi kepada kita semua tentang Pemograman.

Kami menyadari bahwa makalah ini masih jauh dari sempurna, oleh karena itu kritik dan saran dari semua pihak yang bersifat membangun selalu kami harapkan demi kesempurnaan makalah ini.

Akhir kata, kami sampaikan terima kasih kepada semua pihak yang telah berperan serta dalam penyusunan makalah ini dari awal sampai akhir. Semoga Allah SWT senantiasa meridhai segala usaha kita. Amin.

Cibinong
29 September 2013

Fajar Muhammad F
Penyusun

BAB 3 Pendahuluan

Java adalah bahasa pemrograman yang dapat dijalankan di berbagai komputertermasuk telepon genggam. Bahasa ini awalnya dibuat oleh James Gosling saat masih bergabung di Sun Microsystems saat ini merupakan bagian dari Oracle dan dirilis tahun 1995. Bahasa ini banyak mengadopsi sintaksis yang terdapat pada Cdan C++ namun dengan sintaksis model objek yang lebih sederhana serta dukungan rutin-rutin aras bawah yang minimal. Aplikasi-aplikasi berbasis java umumnya dikompilasi ke dalam p-code (*bytecode*) dan dapat dijalankan pada berbagai Mesin Virtual Java (JVM). Java merupakan bahasa pemrograman yang bersifat umum/non-spesifik (*general purpose*), dan secara khusus didisain untuk memanfaatkan dependensi implementasi seminimal mungkin. Karena fungsionalitasnya yang memungkinkan aplikasi java mampu berjalan di beberapa platform sistem operasiyang berbeda, java dikenal pula dengan slogannya, "*Tulis sekali, jalankan di mana pun*". Saat ini java merupakan bahasa pemrograman yang paling populer digunakan, dan secara luas dimanfaatkan dalam pengembangan berbagai jenis perangkat lunak aplikasi ataupun aplikasi berbasis web.

BAB 4 Teori

- Java Layout
    - Flow Layout,menampilkan elemen yang satu baris
    - Grid Layout,menampilkan elemen yang terdiri atas baris dan kolom
    - Border Layout,menampilkan elemen berdasarkan 5 arah utara,selatan,tengah,barat,kiri
- Jframe , bingkai awal GUI
- Jpanel , tempat menaruh elemen elemen GUI
- Java GUI Elemen, Jbutton , Jlabel dan JTextField

BAB 5 Hasil Praktikum

1)Buat AppBorderLayout.java

```
package pack;

//memanggil library di Java
import javax.swing.*;
//memanggil library di Layout
import java.awt.*;

public class AppBorderLayout{
	public static void main(String[] arg){
		//elemen Atas
		JLabel Judul = new JLabel("Form Password");
		Judul.setForeground(new Color(0,0,139));
		Judul.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

		//elemen tengah
		JLabel username = new JLabel("USERNAME");
		JTextField inputUser = new JTextField(15);
		username.setForeground(new Color(0,0,139));
		username.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
		inputUser.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

		JLabel password = new JLabel("PASSWORD");
		JPasswordField inputPass = new JPasswordField(15);
```

```
password.setForeground(new Color(0,0,139));
password.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputPass.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

//elemen bawah
JButton Oke = new JButton("OK");
Oke.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

JButton Batal = new JButton("BATAL");
Batal.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

//footer
JLabel Bawah = new JLabel("Dibuat untuk tugas sesi 2");
Bawah.setForeground(new Color(0,0,139));
Bawah.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

//membuat panel
JPanel bungkus = new JPanel();
bungkus.setBackground(new Color(0,191,255));
bungkus.setLayout(new BorderLayout());

JPanel flowku = new JPanel();
flowku.setLayout(new FlowLayout());
flowku.add(Judul);

JPanel gridku = new JPanel();
gridku.setLayout(new GridLayout(2,2));
```

```
gridku.add(username);
gridku.add(inputUser);
gridku.add(password);
gridku.add(inputPass);

JPanel flowku2 = new JPanel();
flowku2.setLayout(new FlowLayout(FlowLayout.TRAILING));
flowku2.add(Oke);
flowku2.add(Batal);

JPanel flowku3 = new JPanel();
flowku3.setLayout(new FlowLayout(FlowLayout.LEADING));
flowku3.add(Bawah);

JPanel gridku2 = new JPanel();
gridku2.setLayout(new GridLayout(2,1));
gridku2.add(flowku2);
gridku2.add(flowku3);

bungkus.add(flowku,BorderLayout.PAGE_START);
bungkus.add(gridku,BorderLayout.CENTER);
bungkus.add(gridku2,BorderLayout.PAGE_END);

//membuat frame
JFrame bingkai = new JFrame("Form Password");
//memasukan yang dibungkus di panel kedalam frame
bingkai.getContentPane().add(bungkus);
```

```
            //mengeset ukuran bingkai
            bingkai.setSize(300,160);
            //meletakan bingkai dengan posisi ditengah
            bingkai.setLocationRelativeTo(null);
            //menampilkan
            bingkai.setVisible(true);
            bingkai.pack();
        }
}
```

2)screenshoot setelah dicompile

3)Buat Quiz.java

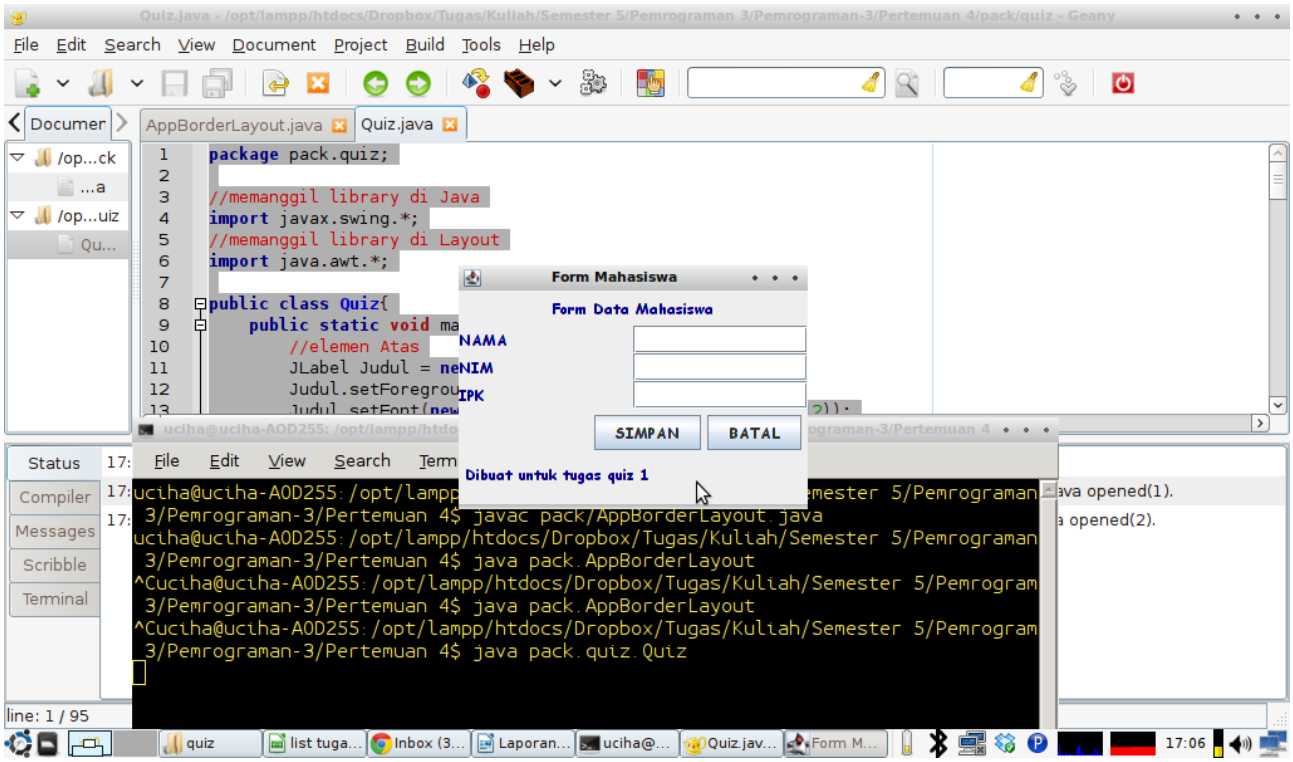
```
package pack.quiz;


//memanggil library di Java
import javax.swing.*;
//memanggil library di Layout
import java.awt.*;


public class Quiz{
        public static void main(String[] arg){
                //elemen Atas
                JLabel Judul = new JLabel("Form Data Mahasiswa");
                Judul.setForeground(new Color(0,0,139));
                Judul.setFont(new Font("Comic Sans MS", Font.BOLD, 12));


                //elemen tengah
                JLabel username = new JLabel("NAMA");
                JTextField inputUser = new JTextField(15);
```

```
username.setForeground(new Color(0,0,139));
username.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputUser.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

JLabel nim = new JLabel("NIM");
JTextField inputNim = new JTextField(15);
nim.setForeground(new Color(0,0,139));
nim.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputNim.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

JLabel ipk = new JLabel("IPK");
JTextField inputIpk = new JTextField(15);
ipk.setForeground(new Color(0,0,139));
ipk.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputIpk.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

//elemen bawah
JButton Oke = new JButton("SIMPAN");
Oke.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

JButton Batal = new JButton("BATAL");
Batal.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

//footer
JLabel Bawah = new JLabel("Dibuat untuk tugas quiz 1");
Bawah.setForeground(new Color(0,0,139));
Bawah.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
```

```
//membuat panel
JPanel bungkus = new JPanel();
bungkus.setBackground(new Color(0,191,255));
bungkus.setLayout(new BorderLayout());

JPanel flowku = new JPanel();
flowku.setLayout(new FlowLayout());
flowku.add(Judul);

JPanel gridku = new JPanel();
gridku.setLayout(new GridLayout(3,2));
gridku.add(username);
gridku.add(inputUser);
gridku.add(nim);
gridku.add(inputNim);
gridku.add(ipk);
gridku.add(inputIpk);

JPanel flowku2 = new JPanel();
flowku2.setLayout(new FlowLayout(FlowLayout.TRAILING));
flowku2.add(Oke);
flowku2.add(Batal);

JPanel flowku3 = new JPanel();
flowku3.setLayout(new FlowLayout(FlowLayout.LEADING));
flowku3.add(Bawah);
```

```
        JPanel gridku2 = new JPanel();
        gridku2.setLayout(new GridLayout(2,1));
        gridku2.add(flowku2);
        gridku2.add(flowku3);

        bungkus.add(flowku,BorderLayout.PAGE_START);
        bungkus.add(gridku,BorderLayout.CENTER);
        bungkus.add(gridku2,BorderLayout.PAGE_END);

        //membuat frame
        JFrame bingkai = new JFrame("Form Mahasiswa");
        //memasukan yang dibungkus di panel kedalam frame
        bingkai.getContentPane().add(bungkus);
        //mengeset ukuran bingkai
        bingkai.setSize(300,160);
        //meletakan bingkai dengan posisi ditengah
        bingkai.setLocationRelativeTo(null);
        //menampilkan
        bingkai.setVisible(true);
        bingkai.pack();
    }
}
```

4)screenshoot setelah dicompile



5)Buat DataMahasiswa.java

package Praktikum;

//memanggil library di Java

import javax.swing.;*

//memanggil library di Layout

import java.awt.;*

import Praktikum.FileChooserDemo;

public class DataMahasiswa {

public static void main(String[] arg){

//elemen Atas

JLabel Judul = new JLabel("Form Data Mahasiswa");

```
Judul.setForeground(new Color(0,0,139));
Judul.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

//elemen tengah
JLabel username = new JLabel("NAMA");
JTextField inputUser = new JTextField(15);
username.setForeground(new Color(0,0,139));
username.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputUser.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

JLabel nim = new JLabel("NIM");
JTextField inputNim = new JTextField(15);
nim.setForeground(new Color(0,0,139));
nim.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputNim.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

JLabel jenkel = new JLabel("JENIS KELAMIN");
JRadioButton laki = new JRadioButton("Laki-Laki");
JRadioButton perempuan = new JRadioButton("Perempuan");
ButtonGroup inputBGroup = new ButtonGroup();
jenkel.setForeground(new Color(0,0,139));
jenkel.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
laki.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
laki.setForeground(new Color(0,0,139));
perempuan.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
perempuan.setForeground(new Color(0,0,139));
```

```
inputBGroup.add(laki);
inputBGroup.add(perempuan);

JPanel inputJenkel = new JPanel();
inputJenkel.setLayout(new GridLayout(2,1));
inputJenkel.add(laki);
inputJenkel.add(perempuan);

JLabel asal_sekolah = new JLabel("ASAL SEKOLAH");
asal_sekolah.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
asal_sekolah.setForeground(new Color(0,0,139));
String[] AsalSekolahStrings = { "SMA - IPA", "SMA - IPS", "SMA - BAHASA",
"SMK" };
JComboBox inputAsalSekolah = new JComboBox(AsalSekolahStrings);
inputAsalSekolah.setSelectedIndex(0);
inputAsalSekolah.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputAsalSekolah.setForeground(new Color(0,0,139));

JLabel nama_sekolah = new JLabel("NAMA SEKOLAH");
JTextField inputNamaSekolah = new JTextField(15);
nama_sekolah.setForeground(new Color(0,0,139));
nama_sekolah.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputNamaSekolah.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

JLabel alamat_sekolah = new JLabel("ALAMAT SEKOLAH");
JTextField inputAlamatSekolah = new JTextField(15);
alamat_sekolah.setForeground(new Color(0,0,139));
```

```
alamat_sekolah.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputAlamatSekolah.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputAlamatSekolah.setForeground(new Color(0,0,139));

JLabel fotoku = new JLabel("FOTO");
fotoku.setForeground(new Color(0,0,139));
fotoku.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
JButton inputFoto = new JButton("Open a File...");
inputFoto.setFont(new Font("Comic Sans MS", Font.BOLD, 12));
inputFoto.addActionListener(new FileChooserDemo());
inputFoto.setActionCommand("1");

//elemen bawah
JButton Oke = new JButton("SIMPAN");
Oke.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

JButton Batal = new JButton("BATAL");
Batal.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

//footer
JLabel Bawah = new JLabel("Dibuat untuk tugas quiz 1");
Bawah.setForeground(new Color(0,0,139));
Bawah.setFont(new Font("Comic Sans MS", Font.BOLD, 12));

//membuat panel
JPanel bungkus = new JPanel();
bungkus.setBackground(new Color(0,191,255));
```

```
bungkus.setLayout(new BorderLayout());

JPanel flowku = new JPanel();
flowku.setLayout(new FlowLayout());

JPanel gridku = new JPanel();
gridku.setLayout(new GridLayout(7,2));
gridku.add(username);
gridku.add(inputUser);
gridku.add(nim);
gridku.add(inputNim);
gridku.add(jenkel);
gridku.add(inputJenkel);
gridku.add(asal_sekolah);
gridku.add(inputAsalSekolah);
gridku.add(nama_sekolah);
gridku.add(inputNamaSekolah);
gridku.add(alamat_sekolah);
gridku.add(inputAlamatSekolah);
gridku.add(fotoku);
gridku.add(inputFoto);

JPanel flowku2 = new JPanel();
flowku2.setLayout(new FlowLayout(FlowLayout.TRAILING));
flowku2.add(Oke);
flowku2.add(Batal);
```

```
        JPanel flowku3 = new JPanel();
        flowku3.setLayout(new FlowLayout(FlowLayout.LEADING));
        flowku3.add(Bawah);

        JPanel gridku2 = new JPanel();
        gridku2.setLayout(new GridLayout(2,1));
        gridku2.add(flowku2);
        gridku2.add(flowku3);

        bungkus.add(flowku,BorderLayout.PAGE_START);
        bungkus.add(gridku,BorderLayout.CENTER);
        bungkus.add(gridku2,BorderLayout.PAGE_END);

        //membuat frame
        JFrame bingkai = new JFrame("Form Mahasiswa");
        //memasukan yang dibungkus di panel kedalam frame
        bingkai.getContentPane().add(bungkus);
        //mengeset ukuran bingkai
        bingkai.setSize(300,160);
        //meletakan bingkai dengan posisi ditengah
        bingkai.setLocationRelativeTo(null);
        //menampilkan
        bingkai.setVisible(true);
        bingkai.pack();
    }
}
```

6)Buat FileChooserDemo.java

```
/*
 * Copyright (c) 1995, 2008, Oracle and/or its affiliates. All rights reserved.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:
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 * CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL,
 * EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,
 * PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR
```

```
 * PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF
 * LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING
 * NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS
 * SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
 */
package Praktikum;

import java.io.*;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.SwingUtilities;
import javax.swing.filechooser.*;

/*
 * FileChooserDemo.java uses these files:
 *   images/Open16.gif
 *   images/Save16.gif
 */
public class FileChooserDemo extends JPanel
                         implements ActionListener {
    static private final String newline = "\n";
    JButton openButton, saveButton;
    JTextArea log;
    JFileChooser fc;

    public FileChooserDemo() {
```

```
super(new BorderLayout());

//Create the log first, because the action listeners
//need to refer to it.
log = new JTextArea(5,20);
log.setMargin(new Insets(5,5,5,5));
log.setEditable(false);
JScrollPane logScrollPane = new JScrollPane(log);

//Create a file chooser
fc = new JFileChooser();

//Uncomment one of the following lines to try a different
//file selection mode.  The first allows just directories
//to be selected (and, at least in the Java look and feel,
//shown).  The second allows both files and directories
//to be selected.  If you leave these lines commented out,
//then the default mode (FILES_ONLY) will be used.
//
//fc.setFileSelectionMode(JFileChooser.DIRECTORIES_ONLY);
//fc.setFileSelectionMode(JFileChooser.FILES_AND_DIRECTORIES);

//Create the open button.  We use the image from the JLF
//Graphics Repository (but we extracted it from the jar).
openButton = new JButton("Open a File...");
openButton.addActionListener(this);
```

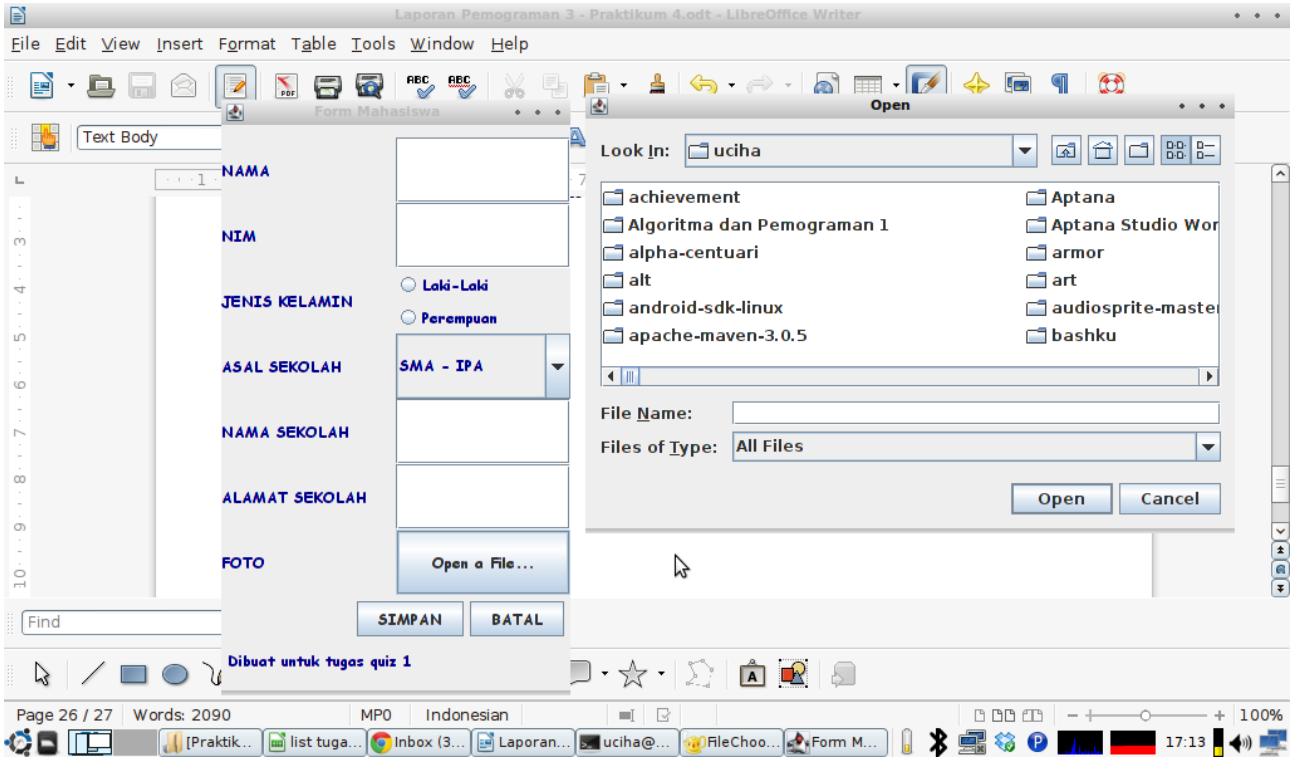
```
    //Create the save button.  We use the image from the JLF
    //Graphics Repository (but we extracted it from the jar).
    saveButton = new JButton("Save a File...");
    saveButton.addActionListener(this);

    //For layout purposes, put the buttons in a separate panel
    JPanel buttonPanel = new JPanel(); //use FlowLayout
    buttonPanel.add(openButton);
    buttonPanel.add(saveButton);

    //Add the buttons and the log to this panel.
    add(buttonPanel, BorderLayout.PAGE_START);
    add(logScrollPane, BorderLayout.CENTER);
}

public void actionPerformed(ActionEvent e) {
            if(e.getActionCommand() == "1"){
                int returnVal = fc.showOpenDialog(FileChooserDemo.this);

        if (returnVal == JFileChooser.APPROVE_OPTION) {
            File file = fc.getSelectedFile();
            //This is where a real application would open the file.
            log.append("Opening: " + file.getName() + "." + newline);
        } else {
            log.append("Open command cancelled by user." + newline);
        }
        log.setCaretPosition(log.getDocument().getLength());
```

```
            }

    //Handle open button action.
    if (e.getSource() == openButton) {
        int returnVal = fc.showOpenDialog(FileChooserDemo.this);

        if (returnVal == JFileChooser.APPROVE_OPTION) {
            File file = fc.getSelectedFile();
            //This is where a real application would open the file.
            log.append("Opening: " + file.getName() + "." + newline);
        } else {
            log.append("Open command cancelled by user." + newline);
        }
        log.setCaretPosition(log.getDocument().getLength());

    //Handle save button action.
    } else if (e.getSource() == saveButton) {
        int returnVal = fc.showSaveDialog(FileChooserDemo.this);
        if (returnVal == JFileChooser.APPROVE_OPTION) {
            File file = fc.getSelectedFile();
            //This is where a real application would save the file.
            log.append("Saving: " + file.getName() + "." + newline);
        } else {
            log.append("Save command cancelled by user." + newline);
        }
        log.setCaretPosition(log.getDocument().getLength());
```

```
    }
}


/**
 * Create the GUI and show it.  For thread safety,
 * this method should be invoked from the
 * event dispatch thread.
 */
private static void createAndShowGUI() {
    //Create and set up the window.
    JFrame frame = new JFrame("FileChooserDemo");
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    //Add content to the window.
    frame.add(new FileChooserDemo());

    //Display the window.
    frame.pack();
    frame.setVisible(true);
}

public static void main(String[] args) {
    //Schedule a job for the event dispatch thread:
    //creating and showing this application's GUI.
    SwingUtilities.invokeLater(new Runnable() {
        public void run() {
```

```
            //Turn off metal's use of bold fonts
            UIManager.put("swing.boldMetal", Boolean.FALSE);
            createAndShowGUI();
        }
    });
  }
}
```

7)screenshoot setelah dicompile



BAB 6 Kesimpulan

Dengan diajarkannya mata kuliah Pemograman 3 saya semakin mengerti tetang membuat program yang baik.

Dan kedepannya semoga dengan bekal ilmu yang telah diajarkan di Mata Kuliah Pemograman 3 Ini bisa diterapkan dalam kehidupan sehari hari agar dapat bermanfaat bagi semua orang.

BAB 7 Daftar Pustaka

Referensi

Study Mata Kuliah Pemograman 3

Modul Praktikum Pemograman 3

http://id.wikipedia.org/wiki/Java

http://www.google.com

http://docs.oracle.com/javase/tutorial/uiswing/components/filechooser.html