Tugas Pemograman 3



Nama: Fajar Muhammad F

NIM:4511210022

Fakultas Teknik Jurusan Teknik Informatika Universitas Pancasila Angkatan 2011

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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
 - JDesktopPane, Desktop untuk memasukan Internal Frame dan dibungkus di Jframe
 - JInternalFrame, untuk membuat Internal Frame berisi Elemen GUI

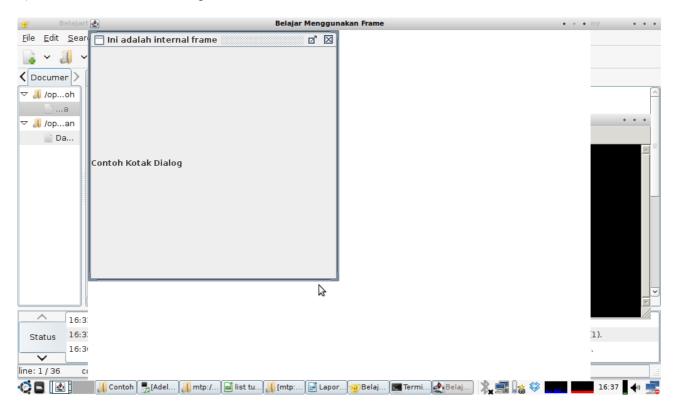
BAB 5 Hasil Praktikum

```
1)Buat BelajarInternalFrame.java
import javax.swing.JFrame;
import javax.swing.JDesktopPane;
import javax.swing.JInternalFrame;
import javax.swing.JLabel;
public class BelajarInternalFrame{
       public static void main(String []args){
              JFrame\ frame = new\ JFrame();
             frame.setTitle("Belajar Menggunakan Frame");
             frame.setSize(800,600);
             frame.setLocationRelativeTo(null);
             frame.setDefaultCloseOperation(JFrame.EXIT ON CLOSE);
             frame.setResizable(false);
             frame.setVisible(true);
              JDesktopPane desktop = new JDesktopPane();
              JInternalFrame inframe = new JInternalFrame();
              inframe.setTitle("Ini adalah internal frame");
              inframe.setSize(400,400);
              inframe.setClosable(true);
```

```
inframe.setResizable(true);
inframe.setMaximizable(true);
inframe.add(new JLabel("Contoh Kotak Dialog"));

desktop.add(inframe);
inframe.setVisible(true);

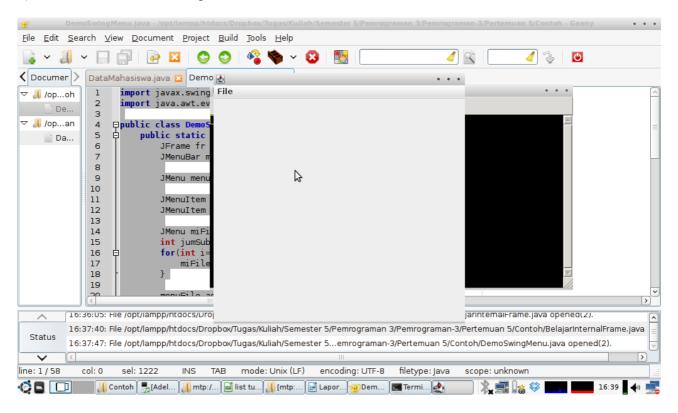
frame.setContentPane(desktop);
frame.setVisible(true);
}
```



```
3)Buat DemoSwingMenu.java
import javax.swing.*;
import java.awt.event.*;
public class DemoSwingMenu{
      public static void main(String[] arg){
             JFrame\ fr = new\ JFrame();
             JMenuBar menuBar = new JMenuBar();
             JMenu menuFile = new JMenu("File");
             JMenuItem miFileNew = new JMenuItem("Menu");
             JMenuItem miFileOpen = new JMenuItem("Open");
             JMenu miFileRencent = new JMenu("Rencent");
             int jumSubmenu = 3;
             for(int i=0; i < jumSubmenu; i++) 
                    miFileRencent.add(new JMenuItem("File "+(i+1)));
             }
             menuFile.add(miFileNew);
             menuFile.add(miFileOpen);
             menuFile.addSeparator();
             menuFile.add(miFileRencent);
```

```
menuBar.add(menuFile);
fr.setJMenuBar(menuBar);
final JPopupMenu pop = new JPopupMenu();
JMenuItem miCut = new JMenuItem("Cut");
JMenuItem miCopy = new JMenuItem("Copy");
pop.add(miCut);
pop.add(miCopy);
JPanel panel = new JPanel();
fr.getContentPane().add(panel);
panel.addMouseListener(new MouseAdapter(){
      public void mouseClicked(MouseEvent e){
             if(e.getButton() != MouseEvent.BUTTON3){
                    return;
             }
             pop.show(
             e.getComponent(),
             e.getX(),
             e.getY()
             );
       }
});
```

```
fr.setSize(400,400);
fr.setLocationRelativeTo(null);
fr.setVisible(true);
}
```



5)Buat DataMahasiswa.java

```
package Latihan;
```

```
//memanggil library di Java
import javax.swing.*;
//memanggil library di Layout
import java.awt.*;
import Latihan.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");
//Menutup Proses setelah diklik Close
bingkai.setDefaultCloseOperation(JFrame.EXIT ON CLOSE);
JDesktopPane desktop = new JDesktopPane();
desktop.setSize(800,600);
//Mengganti warna Background
desktop.setBackground(Color.blue);
JInternalFrame inframe = new JInternalFrame();
inframe.setTitle("internal frame Data Mahasiswa");
```

```
inframe.setSize(400,400);
              inframe.setClosable(true);
              inframe.setResizable(true);
              inframe.setMaximizable(true);
              //Posisi Tengah Internal Frame
              Dimension desktopSize = desktop.getSize();
              Dimension jInternalFrameSize = inframe.getSize();
              inframe.setLocation((desktopSize.width - jInternalFrameSize.width)/2,
(desktopSize.height - jInternalFrameSize.height)/2);
              inframe.add(bungkus);
              desktop.add(inframe);
              inframe.setVisible(true);
              //memasukan yang dibungkus di panel kedalam frame
              bingkai.setContentPane(desktop);
              //mengeset ukuran bingkai
              bingkai.setSize(800,600);
              //meletakan bingkai dengan posisi ditengah
              bingkai.setLocationRelativeTo(null);
              //menampilkan
              bingkai.setVisible(true);
              //bingkai.pack();
```

}

6)Buat FileChooserDemo.java

/*

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*

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```
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* 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 Latihan;
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;
```

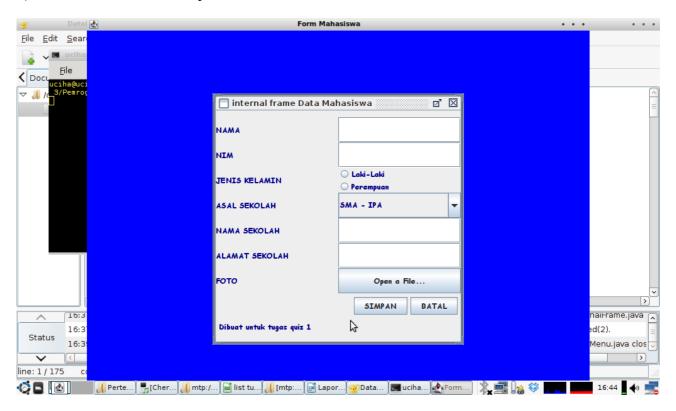
```
public FileChooserDemo() {
  super(new BorderLayout());
  //Create the log first, because the action listeners
  //need to refer to it.
  log = new JTextArea(5,20);
  log.setMargin(new Insets(5,5,5,5));
  log.setEditable(false);
  JScrollPane logScrollPane = new JScrollPane(log);
  //Create a file 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();
}
});
```



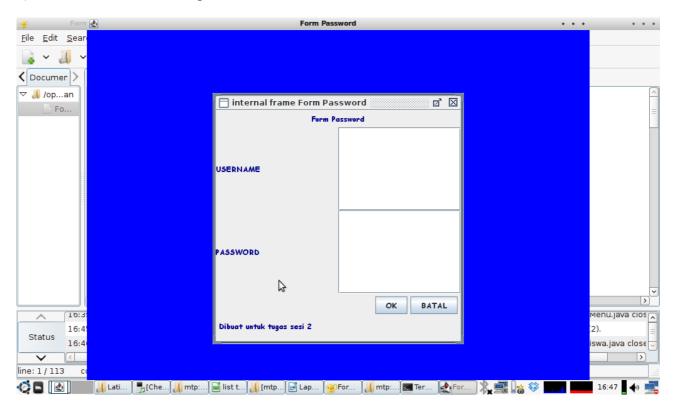
```
8)Buat FormPassword.java
//memanggil library di Java
import javax.swing.*;
//memanggil library di Layout
import java.awt.*;
public class FormPassword{
      public static void main(String[] arg){
             //elemen Atas
             JLabel Judul = new JLabel("Form Password");
             Judul.setForeground(new 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");
             JTextField\ inputPass = new\ JTextField(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");
//Menutup Proses setelah diklik Close
bingkai.setDefaultCloseOperation(JFrame.EXIT ON CLOSE);
//Membuat Dekstop Panel
JDesktopPane desktop = new JDesktopPane();
```

```
desktop.setSize(800,600);
             //Mengganti warna Background
             desktop.setBackground(Color.blue);
             JInternalFrame inframe = new JInternalFrame();
             inframe.setTitle("internal frame Form Password");
             inframe.setSize(400,400);
             inframe.setClosable(true);
             inframe.setResizable(true);
             inframe.setMaximizable(true);
             //Posisi Tengah Internal Frame
             Dimension desktopSize = desktop.getSize();
             Dimension jInternalFrameSize = inframe.getSize();
             inframe.setLocation((desktopSize.width - jInternalFrameSize.width)/2,
(desktopSize.height - jInternalFrameSize.height)/2);
             inframe.add(bungkus);
             desktop.add(inframe);
             inframe.setVisible(true);
             //memasukan yang dibungkus di panel kedalam frame
             bingkai.getContentPane().add(desktop);
             //mengeset ukuran bingkai
             bingkai.setSize(800,600);
```

```
//meletakan bingkai dengan posisi ditengah
bingkai.setLocationRelativeTo(null);
//menampilkan
bingkai.setVisible(true);
//bingkai.pack();
}
```



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

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