UJIAN TENGAH SEMESTER
PEMOGRAMAN KOMPUTER 2

Disusun Oleh :
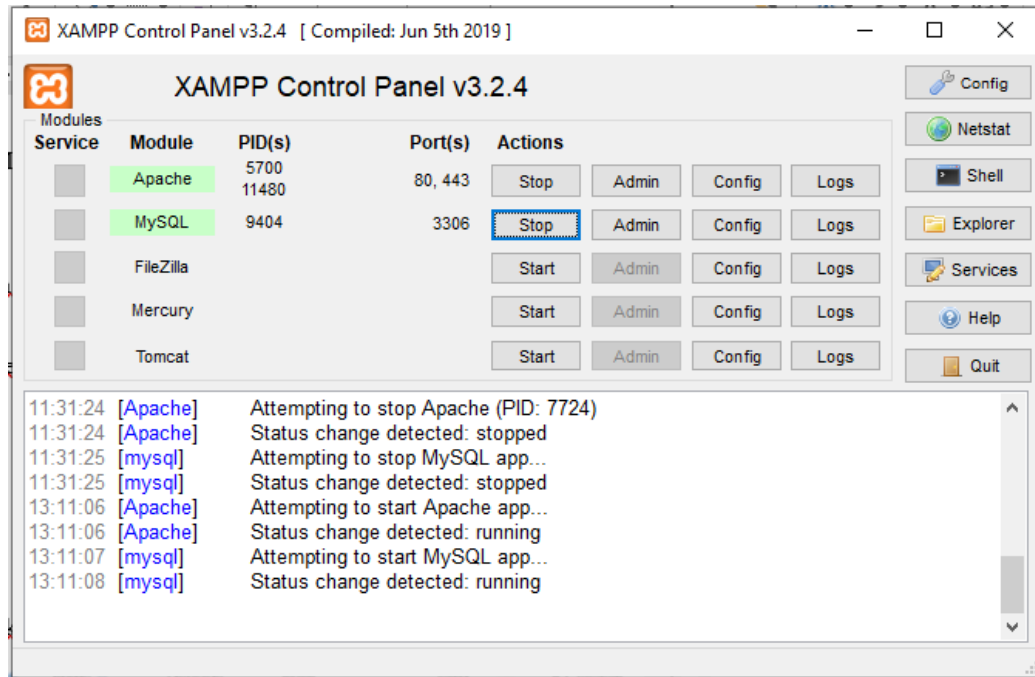
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Kelas   : 4D

Prodi   : DIV Teknik Informatika

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TEKNIK INFORMATIKA
POLITEKNIK HARAPAN BERSAMA TEGAL
2020

Langkah pertama kita harus membuat database terlebih dahulu, caranya seperti berikut :

- Buka aplikasi Xampp dan aktifkan Apache dan MySQL

- Lalu kita buat database dengan nama dukumen dan membuat 2 table dengan nama (admin, data)

- Ditable admin kita buat isi table seperti :

- Ditable data kita buat isi table seperti :

Membuat Project

- Buka Aplikasi Neatbean atau text editor yang anda punya, kali ini saya memakai text editor neatbean.

- Lalu buat Project dengan nama "UTS_PK2_Azam Putra Imanto_18090011_4D" atau nama file terserah kalian.
- Dan selanjutnya kita buat package dengan nama "Dokumen" atau nama package terserah kalian

- Selanjutnya kita buat class dengan nama koneksi untuk mengoneksikan project kita kedatabase
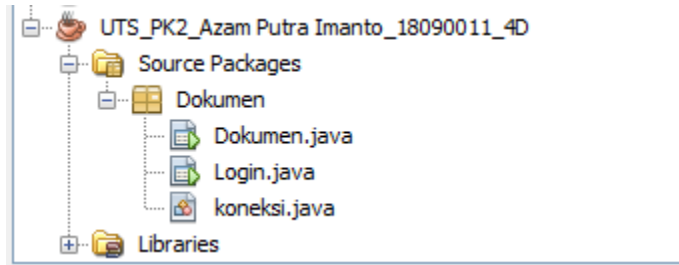
- Isi class koneksi.java adalah sebagai berikut
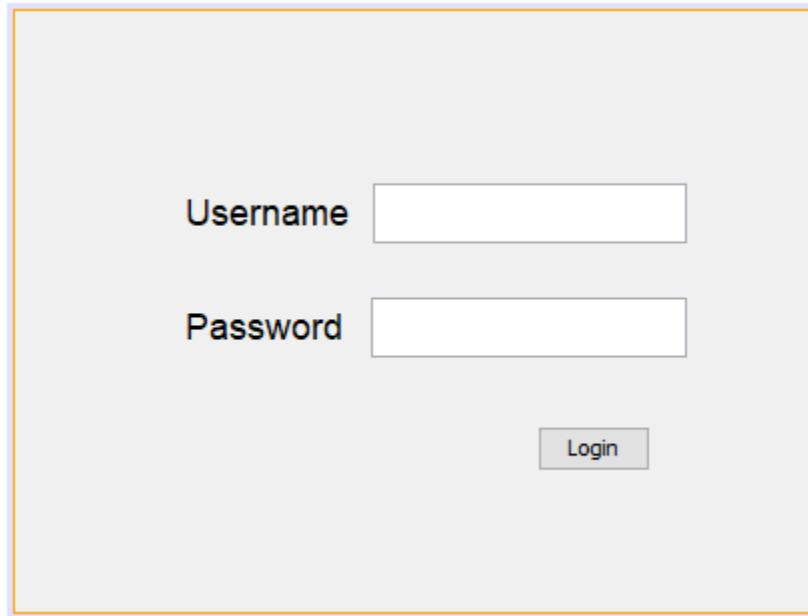
```java
package Dokumen;

import java.sql.Connection;
/* Azam Putra Imanto(18090011)4D */
import java.sql.DriverManager;
import java.sql.SQLException;

public class koneksi {
    private static Connection MySQLConfig;

    public static Connection configDB() throws SQLException{
        try {
            String url = "jdbc:mysql://localhost:3306/dokumen";
            String user = "root";
            String pass = "";

            DriverManager.registerDriver(new com.mysql.jdbc.Driver());
            MySQLConfig = DriverManager.getConnection(url , user , pass);
        } catch (Exception e) {
            System.out.println("Koneksi Ke Database Gagal"+e.getMessage());
        }
        return MySQLConfig;
    }
}
```

- Selanjutnya kita membuat Jframe Dukomen dan Login tampilanya seperti berikut.
- Tampilan Login

- Isi dari Jframe login adalah seperti berikut

- Kodingan Jframe login adalah seperti berikut :

```java
package Dokumen;

import java.awt.Frame;
import java.security.MessageDigest;
import java.security.NoSuchAlgorithmException;
/* Azam Putra Imanto(18090011)4D */
import java.sql.Connection;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.swing.JOptionPane;

public class Login extends javax.swing.JFrame {
    public Login() {
        initComponents();
    }

    private void loginActionPerformed(java.awt.event.ActionEvent evt) {
        doLogin();
    }

public static void main(String args[]) {
java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            Login login = new Login();
            login.setExtendedState(Frame.MAXIMIZED_BOTH);
            new Login().setVisible(true);
        }
    });
    }
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JButton login;
    private javax.swing.JPasswordField password;
    private javax.swing.JTextField username;
```
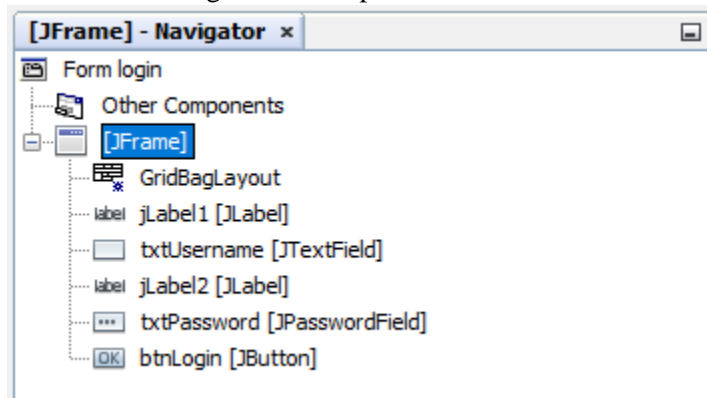
```java
public void doLogin() {

    login.setEnabled(false);

    String user = username.getText();

    char[] pass = password.getPassword();

    if (user.isEmpty()) {

        JOptionPane.showMessageDialog(this, "Username harus diisi");

        username.requestFocus();

    } else if (pass.length == 0) {

        JOptionPane.showMessageDialog(this, "Password harus diisi");

        password.requestFocus();

    } else {

        String password = new String(pass);

        String md5_pass = md5(password);

        try {

            Connection c = koneksi.configDB();

            Statement st = c.createStatement();

            String q = " SELECT * FROM admin "

                + "WHERE username = '" + user + "' "

                + "AND password = '" + md5_pass + "'";

ResultSet rs = st.executeQuery(q);

            int n = 0;

            while (rs.next()) {

                String u = rs.getString("username");

                String p = rs.getString("password");

                n++;

            }

            if (n == 0) {

                JOptionPane.showMessageDialog(this, "Username/password salah!");

                username.requestFocus();

                login.setEnabled(true);

            }
```

```java
else {

            Dokumen kar = new Dokumen();

            this.setVisible(false);

            kar.setExtendedState(Frame.MAXIMIZED_BOTH);

            kar.setVisible(true);

        }
} catch (Exception e) {

        System.out.println(e.getMessage());

    }

  }


public static String md5(String data) {

    String hashed = "";

    try {

       MessageDigest md5 = MessageDigest.getInstance("MD5");

       md5.update(data.getBytes());

       byte[] byteData = md5.digest();

       StringBuilder sb = new StringBuilder();

       for (int i = 0; i < byteData.length; i++) {

          sb.append(Integer.toString((byteData[i] & 0xff)

              + 0x100, 16).substring(1));

       }

       hashed = sb.toString();

    } catch (NoSuchAlgorithmException e) {

    }

    return hashed;

  }
}
```

- Tampilan Dokumen

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Arsip Dokumen

Kode Dokumen		Simpan
Nama Dokumen		Tambah
Kategori Dokumen	Umum ⌄	Edit
Lokasi Dokument(Path)		Hapus
Deskripsi Dokumen		Batal
Tanggal		Log Out

Cari [   ]

Title 1	Title 2	Title 3	Title 4

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- Isi dari Jframe login adalah seperti berikut :
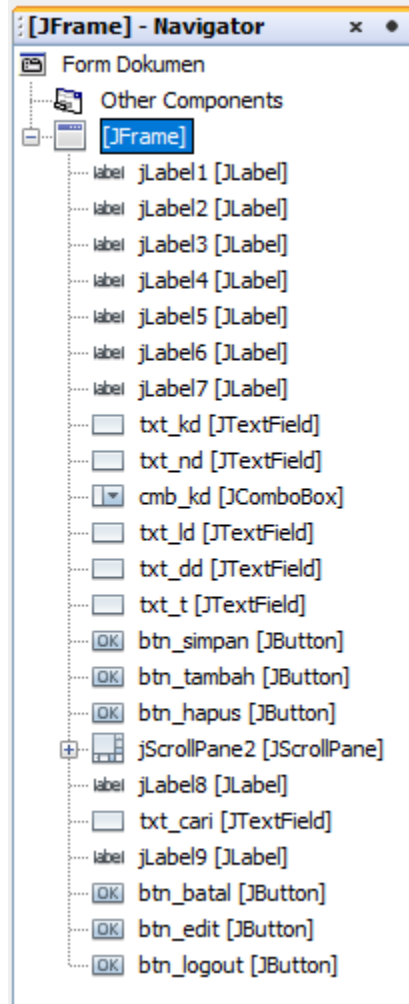
- Kodingan Jframe Dokumen adalah seperti berikut :

```java
package Dokumen;

import java.awt.HeadlessException;
import java.sql.Connection;
/* Azam Putra Imanto(18090011)4D */
import java.sql.SQLException;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class Dokumen extends javax.swing.JFrame {

    private void kosongkan_from() {
        txt_kd.setEditable(true);
        txt_kd.setText(null);
        txt_nd.setText(null);
        cmb_kd.setSelectedItem(this);
        txt_ld.setText(null);
        txt_dd.setText(null);
        txt_t.setText(null);
    }

    private void tampilkan_data() {
        DefaultTableModel model = new DefaultTableModel();
        model.addColumn("No.");
        model.addColumn("Kode Dokumen");
        model.addColumn("Nama Dokumen");
        model.addColumn("Kategori Dokumen");
        model.addColumn("Lokasi Dokumen");
        model.addColumn("Deskripsi Dokumen");
        model.addColumn("Tanggal");

        String cari= txt_cari.getText();
```

```java
try {

        int no = 1;

        String sql = "SELECT *FROM data WHERE nama LIKE '%"+cari+"%' ";

        java.sql.Connection conn = (Connection)koneksi.configDB();

        java.sql.Statement stm = conn.createStatement();

        java.sql.ResultSet res = stm.executeQuery(sql);


        while (res.next()) {

           model.addRow(new Object[]{no++,res.getString(1),

                res.getString(2),res.getString(3),res.getString(4),res.getString(5),res.getString(6)});

        }

        tbl_data.setModel(model);

    } catch (Exception e) {

        System.out.println("Error : "+e.getMessage());

    }

  }

  public Dokumen() {

    initComponents();

    tampilkan_data();

    kosongkan_from();

  }


// KODINGAN HAPUS DATA

private void btn_batalActionPerformed(java.awt.event.ActionEvent evt) {

    kosongkan_from();

  }


// KODINGAN LOGOUT DATA

  private void btn_logoutActionPerformed(java.awt.event.ActionEvent evt) {

    System.exit(0);

  }
```

```java
// KODINGAN SIMPAN DATA
private void btn_simpanActionPerformed(java.awt.event.ActionEvent evt) {
    try {
        String sql = "INSERT INTO data VALUES ('"+ txt_kd.getText() +"', '"+ txt_nd.getText() +"',
          '"+ cmb_kd.getSelectedItem() +"', '"+ txt_ld.getText() +"', '"+ txt_dd.getText() +"', '"+ txt_t.getText() +"')";
        java.sql.Connection conn = (Connection)koneksi.configDB();
        java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
        pstm.execute();
        JOptionPane.showMessageDialog(null, "Proses simpan Data berhasil");
        tampilkan_data();
        kosongkan_from();
    } catch (HeadlessException | SQLException e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
    }
}


// KODINGAN TAMBAH DATA
private void btn_tambahActionPerformed(java.awt.event.ActionEvent evt) {
    try {
        String sql = "INSERT INTO data VALUES ('"+ txt_kd.getText() +"', '"+ txt_nd.getText() +"', '"+
        cmb_kd.getSelectedItem() +"', '"+ txt_ld.getText() +"', '"+ txt_dd.getText() +"', '"+ txt_t.getText() +"')";
        java.sql.Connection conn = (Connection)koneksi.configDB();
        java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
        pstm.execute();
        JOptionPane.showMessageDialog(null, "Proses simpan Data berhasil");
        tampilkan_data();
        kosongkan_from();
    } catch (HeadlessException | SQLException e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
    }

    txt_kd.setFocusable(true);
}
```

```java
//KODINGAN PENAMPILAN TABLE
private void tbl_dataMouseClicked(java.awt.event.MouseEvent evt) {

    int baris = tbl_data.rowAtPoint(evt.getPoint());

    String kode = tbl_data.getValueAt(baris, 1).toString();

    txt_kd.setText(kode);

    String nama = tbl_data.getValueAt(baris, 2).toString();

    txt_nd.setText(nama);

    String kategori = tbl_data.getValueAt(baris, 3).toString();

    cmb_kd.setSelectedItem(kategori);

    String lokasi = tbl_data.getValueAt(baris, 4).toString();

    txt_ld.setText(lokasi);

    String deskripsi = tbl_data.getValueAt(baris, 5).toString();

    txt_dd.setText(deskripsi);

    String tanggal = tbl_data.getValueAt(baris, 6).toString();

    txt_t.setText(tanggal);

}


//KODINGAN EDIT DATA
private void btn_editActionPerformed(java.awt.event.ActionEvent evt) {
    try {

        String sql = "UPDATE data SET kode = '"+ txt_kd.getText() +"', nama = '"+ txt_nd.getText() +"', kategori = '"+
        cmb_kd.getSelectedItem() +"', lokasi = '"+ txt_ld.getText() +"', deskripsi = '"+ txt_dd.getText() +"', tanggal = '"+
        txt_t.getText() +"' WHERE kode = '"+ txt_kd.getText() +"'";

        java.sql.Connection conn = (Connection)koneksi.configDB();

        java.sql.PreparedStatement pstm = conn.prepareStatement(sql);

        pstm.execute();

        JOptionPane.showMessageDialog(null, "Edit Data Berhasil");

    } catch (HeadlessException | SQLException e) {

        JOptionPane.showMessageDialog(this, e.getMessage());

    }

    tampilkan_data();

    kosongkan_from();

}
```
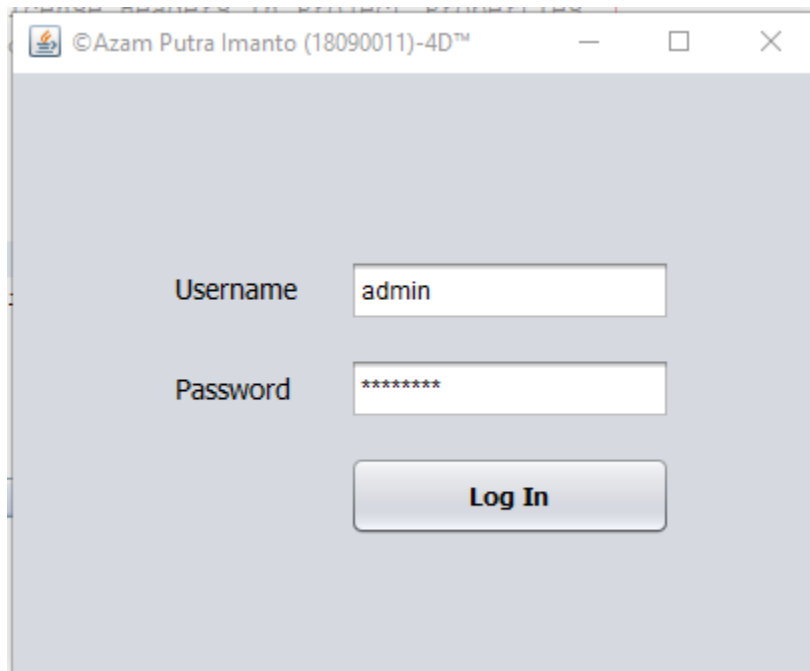
```java
//KODINGAN HAPUS DATA
private void btn_hapusActionPerformed(java.awt.event.ActionEvent evt) {
    try {
        String sql = "DELETE FROM data WHERE kode = '"+txt_kd.getText()+"'";
        java.sql.Connection conn = (Connection)koneksi.configDB();
        java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
        pstm.execute();
        JOptionPane.showMessageDialog(null, "Hapus Data Berhasil");
    } catch (HeadlessException | SQLException e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
    }
    tampilkan_data();
    kosongkan_from();
}

//KODINGAN CARI DATA
private void txt_cariKeyPressed(java.awt.event.KeyEvent evt) {
    tampilkan_data();
}

public static void main(String args[]) {
java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new Dokumen().setVisible(true);
        }
    });
}
```

```java
private javax.swing.JButton btn_batal;
    private javax.swing.JButton btn_edit;
    private javax.swing.JButton btn_hapus;
    private javax.swing.JButton btn_logout;
    private javax.swing.JButton btn_simpan;
    private javax.swing.JButton btn_tambah;
    private javax.swing.JComboBox cmb_kd;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JLabel jLabel8;
    private javax.swing.JLabel jLabel9;
    private javax.swing.JScrollPane jScrollPane2;
    private javax.swing.JTable tbl_data;
    private javax.swing.JTextField txt_cari;
    private javax.swing.JTextField txt_dd;
    private javax.swing.JTextField txt_kd;
    private javax.swing.JTextField txt_ld;
    private javax.swing.JTextField txt_nd;
    private javax.swing.JTextField txt_t;


}
```

Tampilan Halaman Login

Tampilan Halaman Document

Tampilan Simpan Data

Tampilan Hapus Data

Tampilan Database Document

kode	nama	kategori	path	deskripsi	tanggal
17302020	CV Azam Putra Imanto	Pribadi	Pemalang	Penting	2020-01-30

Tampilan Database Admin

←T→			id	username	password
☐ 🖉 Ubah ⌗ Salin ⊖ Hapus			1	admin	0192023a7bbd73250516f069df18b500