#### **Ujian Tengah Semester Genap**

Nama: Eka Sri Mulyani

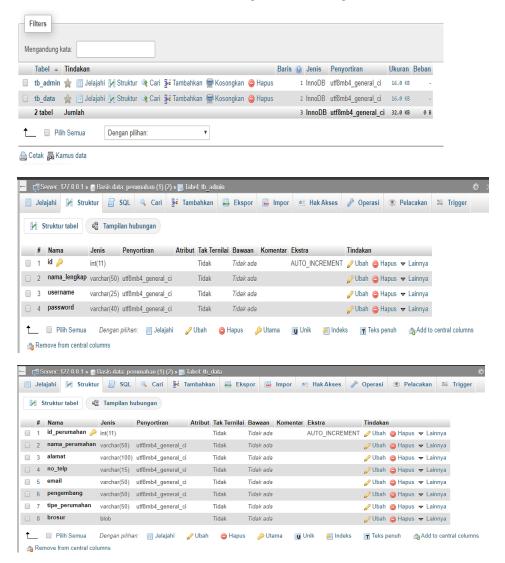
Nim: 18090018

Kelas: 4B

Mata Kuliah: Pemrograman Komputer 2

# 1.) Pembuatan Basis Data

- a. Buka XAMPP, jalankan Apache dan MySQL.
- b. Buka phpmyadmin, kemudian buat basis data baru dengan nama perumahan-uts.
- c. Buat tabel baru dalam database dengan detail sebagai berikut:



# 2.) Membuat Project

Untuk membuat project baru di Netbeans ikuti langkah-langkah berikut:

- 1. Klik menu File New Project, selanjutnya New Project.
- Pilih dialog New Project, pilih Categories Java, dan pilih jenis Project pilih Java
   Application > klik Next untuk melanjutkan ke tahap berikutnya.
- 3. Pada **New Java Application**, isi field dan pilihan yang ada, dengan nama project "eka\_\_18090018", jangan lupa **hilangkan centang pada checkbox** kemudian klik **finish**.

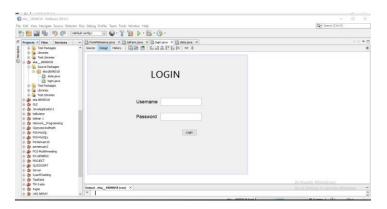
#### 3.) Membuat Paket Baru

- 1. Klik kanan pada node **Source Package** > **New** > **Java Package**.
- Pilih dialog New Java Package, isikan "Aplikasi" pada kotak isian nama paket (package name)
- 3. Klik Finish.

## 4.) Membuat Form Baru

Untuk membuat form baru dalam sebuah project, ikuti langkah-langkah berikut:

- 1. Klik kanan pada package **Aplikasi** klik **New** > Klik **Jframe From**.
- 2. Pada field Class Name, isikan "login"
- 3. Desainlah tampilan dan lakukan penamaan variabel pada komponen seperti gambar berikut



- Username > JLabel
- Password > JLabel
- JTextField > txtusername
- JTextField > txtpassword
- JButton > btnlogin

Kemudian kembali ke form login klik Source dan isikan kode seperti di bawah ini :

- a. Pastikan kelas-kelas yang dibutuhkan dalam kelas ini telah di-import semua.
- b. Code untuk menjalankan Form login:

```
package eka18090018;
import java.awt.Frame;
import java.security.MessageDigest;
import java.security.NoSuchAlgorithmException;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.swing.JOptionPane;
* @author ekasrimulyani
*/
public class login extends javax.swing.JFrame {
  /**
  * Creates new form login
  */
  public login() {
    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.
```

```
private void initComponents() {
    jLabel1 = new javax.swing.JLabel();
    txtUsername = new javax.swing.JTextField();
    jLabel2 = new javax.swing.JLabel();
    txtPassword = new javax.swing.JPasswordField();
    btnLogin = new javax.swing.JButton();
    jPanel1 = new javax.swing.JPanel();
    jLabel3 = new javax.swing.JLabel();
    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    setBackground(new java.awt.Color(0, 153, 153));
    setIconImages(null);
    getContentPane().setLayout(new org.netbeans.lib.awtextra.AbsoluteLayout());
    jLabel1.setFont(new java.awt.Font("Dialog", 0, 18)); // NOI18N
    jLabel1.setText("Username");
    getContentPane().add(jLabel1, new org.netbeans.lib.awtextra.AbsoluteConstraints(184, 164, -1, -
1));
    txtUsername.setFont(new java.awt.Font("Dialog", 0, 18)); // NOI18N
    getContentPane().add(txtUsername, new org.netbeans.lib.awtextra.AbsoluteConstraints(278, 162,
157, -1));
    jLabel2.setFont(new java.awt.Font("Dialog", 0, 18)); // NOI18N
    jLabel2.setText("Password");
    getContentPane().add(jLabel2, new org.netbeans.lib.awtextra.AbsoluteConstraints(184, 221, -1, -
1));
```

```
txtPassword.setFont(new java.awt.Font("Dialog", 0, 18)); // NOI18N
    getContentPane().add(txtPassword, new org.netbeans.lib.awtextra.AbsoluteConstraints(277, 219,
158, -1));
    btnLogin.setText("Login");
    btnLogin.addActionListener(new java.awt.event.ActionListener() {
      public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnLoginActionPerformed(evt);
      }
    });
    getContentPane().add(btnLogin, new org.netbeans.lib.awtextra.AbsoluteConstraints(360, 283, -1, -
1));
    getContentPane().add(jPanel1, new org.netbeans.lib.awtextra.AbsoluteConstraints(496, 125, -1, -
1));
    jLabel3.setBackground(new java.awt.Color(255, 51, 102));
    jLabel3.setFont(new java.awt.Font("Yu Gothic UI Semilight", 1, 36)); // NOI18N
    jLabel3.setText("LOGIN");
    getContentPane().add(jLabel3, new org.netbeans.lib.awtextra.AbsoluteConstraints(240, 30, 150,
80));
    pack();
  }
  private void btnLoginActionPerformed(java.awt.event.ActionEvent evt) {
    proses();
  }
  /**
  * @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(login.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (InstantiationException ex) {
      java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (IllegalAccessException ex) {
      java.util.logging.Logger.getLogger(login.class.getName()).log(java.util.logging.Level.SEVERE, null,
ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
      java.util.logging.Logger.getLogger(login.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() {
         login login = new login();
```

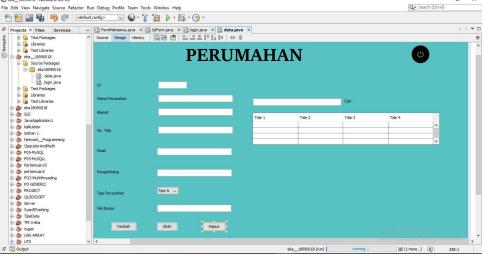
```
login.setExtendedState(Frame.MAXIMIZED_BOTH);
        login.setVisible(true);
      }
    });
  }
  // Variables declaration - do not modify
  private javax.swing.JButton btnLogin;
  private javax.swing.JLabel jLabel1;
  private javax.swing.JLabel jLabel2;
  private javax.swing.JLabel jLabel3;
  private javax.swing.JPanel jPanel1;
  private javax.swing.JPasswordField txtPassword;
  private javax.swing.JTextField txtUsername;
  // End of variables declaration
//md5
  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;
}
private void proses() {
 String user = txtUsername.getText();
 char[] pass = txtPassword.getPassword();
 if(user.isEmpty()){
   JOptionPane.showMessageDialog(this, "username wajib diisi");
   txtPassword.requestFocus();
 }else if(pass.length == 0){
   JOptionPane.showMessageDialog(this, "password harus diisi");
   txtPassword.requestFocus();
 }else{
   String password = new String(pass);
   btnLogin.setEnabled(false);
   try {
     Connection cn = DriverManager.getConnection("jdbc:mysql://localhost/perumahan","root","");
     Statement st = cn.createStatement();
     String q = "SELECT * FROM tb_admin "
          + "WHERE username=""+user+" ' "
          + "AND password=MD5(""+password+"")";
      ResultSet rs = st.executeQuery(q);
      if(rs.next()){
        data d = new data();
        d.setExtendedState(Frame.MAXIMIZED_BOTH);
        this.setVisible(false);
        d.setVisible(true);
      }else{
        JOptionPane.showMessageDialog(this, "Username/password salah!");
```

```
txtUsername.requestFocus();
}
btnLogin.setEnabled(true);
} catch (Exception e) {
    JOptionPane.showMessageDialog(this, e.getMessage());
}

c. Pada JButton login, anda double click, isikan kode berikut :
    private void btnloginActionPerformed(java.awt.event.ActionEvent evt) {
    proses();
}
```

6.) Membuat Jframe perumahan sebagai berikut :



```
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
package eka18090018;
import java.io.File;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.JFileChooser;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;
/**
* @author ekasrimulyani
public class data extends javax.swing.JFrame {
  /**
   * Creates new form data
  DefaultTableModel model;
  public data() {
    initComponents();
    String[] judul = {"Id", "No", "Nama Perumahan", "Alamat", "No. Telp", "Email", "Pengembang",
"Tipe", "Brosur"};
```

```
model = new DefaultTableModel(judul, 0);
     tblData.setModel(model);
    loadData("");
     txtId.setEnabled(false);
  }
  private void txtPerumahanActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
  private void txtAlamatActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
  private void txtTelpActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
  }
  private void txtEmailActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
  private void txtBrosurActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
  private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
     try {
       Connection cn = DriverManager.getConnection("jdbc:mysql://localhost/perumahan", "root", "");
       cn.createStatement().executeUpdate("INSERT INTO perumahan(id, nama, alamat, telp, email,
pengembang, tipe, brosur) VALUES "+ "(NULL, " + "'" + txtPerumahan.getText() + "'," +
txtAlamat.getText() + "',"' + txtTelp.getText() + "',"' + txtEmail.getText() + "',"' +
txtPengembang.getText() + "',"' + cmbTipe.getSelectedItem() + "',"' + txtBrosur.getText() + "')");
       JOptionPane.showMessageDialog(null, "Penyimpanan Data Berhasill....");
     } catch (SOLException ex) {
       JOptionPane.showMessageDialog(null, "ada yang belum diisi!!");
    loadData("");
  private void tblDataMouseClicked(java.awt.event.MouseEvent evt) {
    int i = tblData.getSelectedRow();
    if (i > -1) {
       txtId.setText(model.getValueAt(i, 0).toString());
       txtPerumahan.setText(model.getValueAt(i, 2).toString());
       txtAlamat.setText(model.getValueAt(i, 3).toString());
       txtTelp.setText(model.getValueAt(i, 4).toString());
```

```
txtEmail.setText(model.getValueAt(i, 5).toString());
       txtPengembang.setText(model.getValueAt(i, 6).toString());
       cmbTipe.setSelectedItem(model.getValueAt(i, 7));
       txtBrosur.setText(model.getValueAt(i, 8).toString());
    }
  }
  private void btnUbahActionPerformed(java.awt.event.ActionEvent evt) {
     try {
       Connection cn = DriverManager.getConnection("jdbc:mysql://localhost/perumahan", "root", "");
       Statement st = cn.createStatement();
       cn.createStatement().executeUpdate("UPDATE perumahan set nama ="" +
txtPerumahan.getText() + "',alamat ="" + txtAlamat.getText() + "',telp ="" + txtTelp.getText() + "',email
="" + txtEmail.getText() + "",pengembang ="" + txtPengembang.getText() + "",tipe ="" +
cmbTipe.getSelectedItem() + "',brosur ="" + txtBrosur.getText() + "' WHERE id ="" + txtId.getText() +
""");
       JOptionPane.showMessageDialog(null, "Data telah diedit.....");
       loadData("");
     } catch (SQLException ex) {
       ex.printStackTrace();
  }
  private void btnHapusActionPerformed(java.awt.event.ActionEvent evt) {
    int baris = tblData.getSelectedRow();
     if (baris != -1) {
       int id = Integer.parseInt(tblData.getValueAt(baris, 0).toString());
       int pilih = JOptionPane.showConfirmDialog(this, "" + "Apakah Anda yakin?", "Konfirmasi",
            JOptionPane.YES_NO_OPTION);
       if (pilih == 0) {
         try {
            // TODO add your handling code here:
            Connection cn = DriverManager.getConnection("jdbc:mysql://localhost/perumahan", "root",
"");
            cn.createStatement().executeUpdate("DELETE FROM perumahan where id ="" +
txtId.getText() + """);
            loadData("");
            JOptionPane.showMessageDialog(null, "data terhapus....");
          } catch (SQLException ex) {
            Logger.getLogger(data.class.getName()).log(Level.SEVERE, null, ex);
  }
  private void txtPengembangActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
  private void txtCariKeyReleased(java.awt.event.KeyEvent evt) {
```

```
String key = txtCari.getText();
    if (key.isEmpty()) {
       loadData("");
    } else {
       loadData(key);
  }
  private void txtCariActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
  private void jLabel7MouseClicked(java.awt.event.MouseEvent evt) {
    // TODO add your handling code here:
  }
  private void jLabel10MouseClicked(java.awt.event.MouseEvent evt) {
    if (JOptionPane.showConfirmDialog(null, "Apakah Anda Yakin Ingin Keluar?", "Terima Kasih Atas
Perhatiannya", JOptionPane.YES NO OPTION) == JOptionPane.YES OPTION) {
       System.exit(0);
    }
  }
//logout
  private void jLabel9MouseClicked(java.awt.event.MouseEvent evt) {
   if (JOptionPane.showConfirmDialog(null, "Apakah Anda Yakin Ingin Keluar?", "Terima Kasih Atas
Perhatiannya", JOptionPane.YES_NO_OPTION) == JOptionPane.YES_OPTION) {
       System.exit(0);
    }
  }
  /**
   * @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(data.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
```

```
} catch (InstantiationException ex) {
       java.util.logging.Logger.getLogger(data.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
     } catch (IllegalAccessException ex) {
       java.util.logging.Logger.getLogger(data.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
     } catch (javax.swing.UnsupportedLookAndFeelException ex) {
       java.util.logging.Logger.getLogger(data.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 data().setVisible(true);
     });
  // Variables declaration - do not modify
  private javax.swing.JLabel ID;
  private javax.swing.JButton btnHapus;
  private javax.swing.JButton btnUbah;
  private javax.swing.JComboBox<String> cmbTipe;
  private javax.swing.JLabel gambar;
  private javax.swing.JButton jButton1;
  private javax.swing.JLabel jLabel1;
  private javax.swing.JLabel jLabel10;
  private javax.swing.JLabel jLabel11;
  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.JPanel jPanel2;
  private javax.swing.JScrollPane jScrollPane1;
  private javax.swing.JTable tblData;
  private javax.swing.JTextField txtAlamat;
  private javax.swing.JTextField txtBrosur;
  private javax.swing.JTextField txtCari;
  private javax.swing.JTextField txtEmail;
  private javax.swing.JTextField txtId;
  private javax.swing.JTextField txtPengembang;
  private javax.swing.JTextField txtPerumahan;
  private javax.swing.JTextField txtTelp;
  // End of variables declaration
```

```
private void loadData(String key) {
    try {
       model.setRowCount(0);
       Connection cn = DriverManager.getConnection("jdbc:mysql://localhost/perumahan", "root", "");
       Statement st = cn.createStatement();
       String where = key.isEmpty()? "": "WHERE nama LIKE '%" + key + "%' OR alamat LIKE '%"
+ key + "%' OR telp LIKE '%" + key + "%' OR email LIKE '%" + key + "%' OR tipe LIKE '%" + key +
"%' OR brosur LIKE '%" + key + "%";
       ResultSet rs = st.executeQuery("SELECT * FROM perumahan" + where);
       int no = 0;
       while (rs.next()) {
         no++;
         int id = rs.getInt("id");
         String nama = rs.getString("nama");
         String alamat = rs.getString("alamat");
         String telp = rs.getString("telp");
         String email = rs.getString("email");
         String pengembang = rs.getString("pengembang");
         String tipe = rs.getString("tipe");
         String brosur = rs.getString("brosur");
         Object[] data = {id, no, nama, alamat, telp, email, pengembang, tipe, brosur};
         model.addRow(data);
       }
    } catch (Exception e) {
       JOptionPane.showMessageDialog(this, e.getMessage());
    }
  }
}
```

## HASILNYA,,



