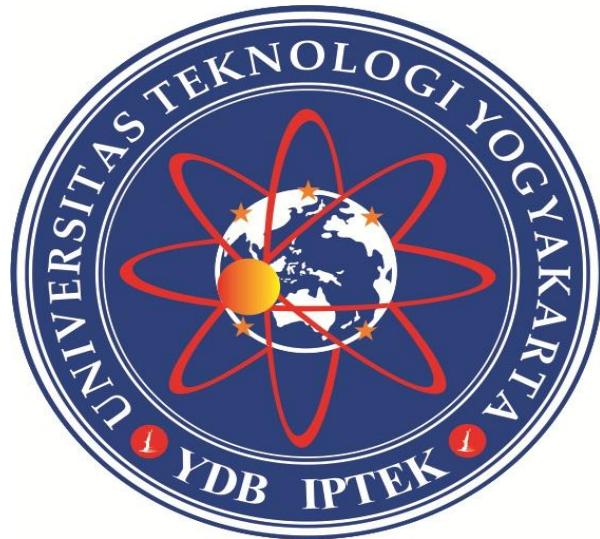


## LAPORAN Praktikum Java

“Koneksi DataBase Menggunakan NetBean Java Dan My Sql”



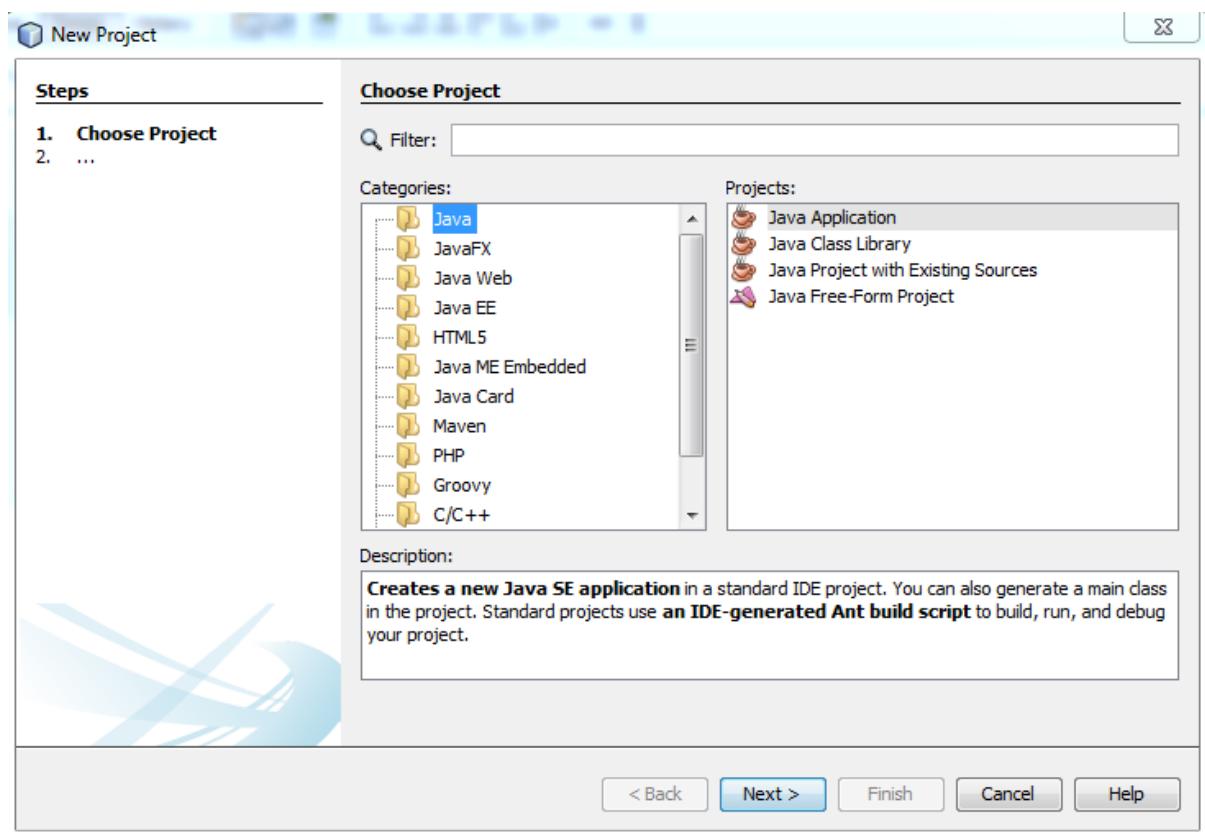
Di Susun Oleh:

1. Fajar Dwi Cahyo Danu Wijaya      5140411333

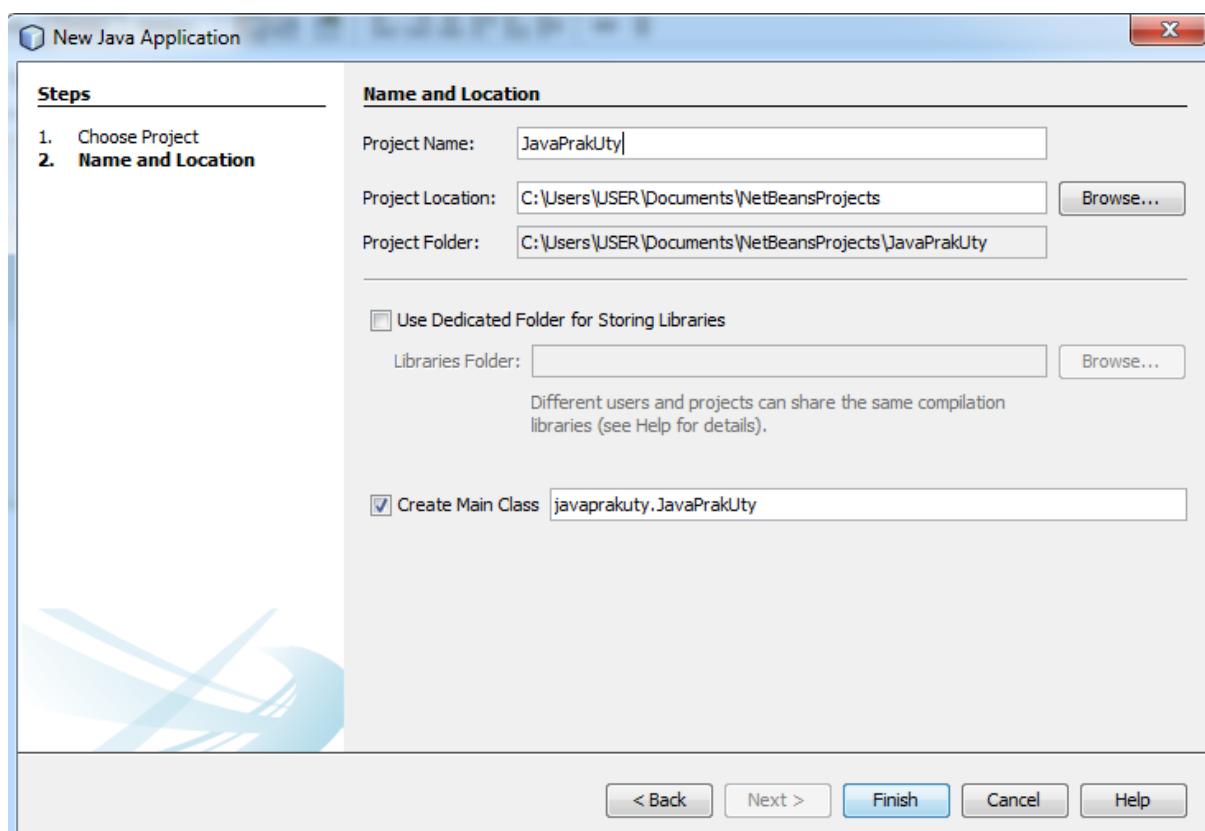
UNIVERSITAS TEKNOLOGI YOGYAKARTA

2017

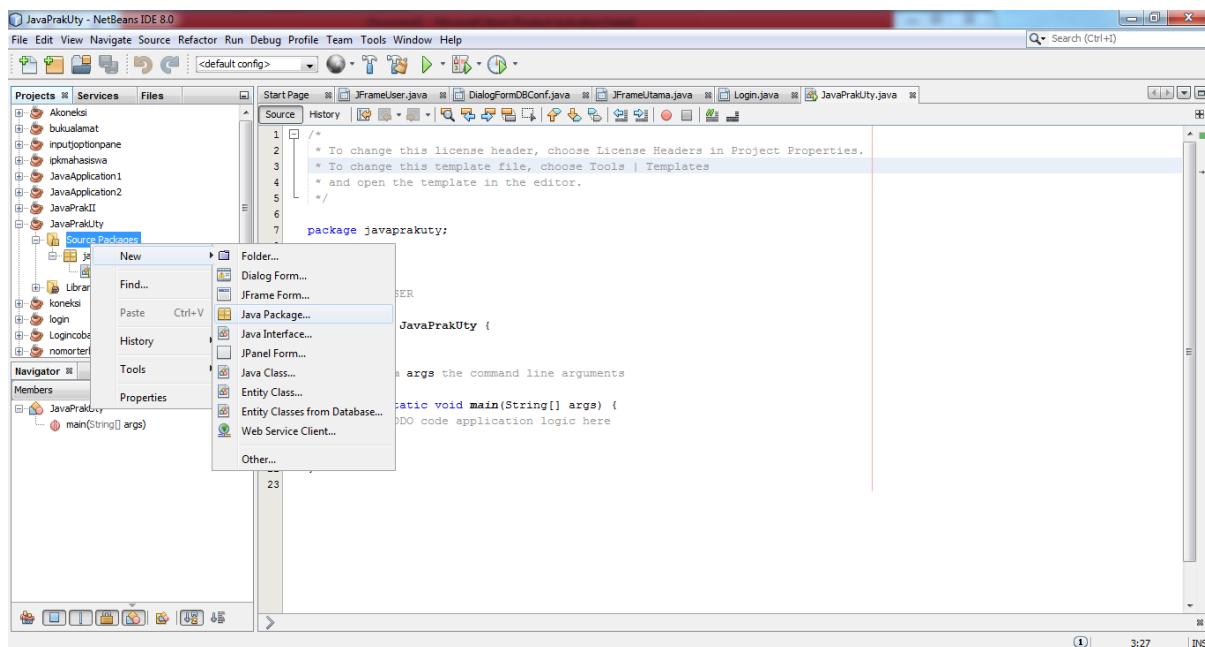
1.Klick New Project pilih Java Application dan Klick next



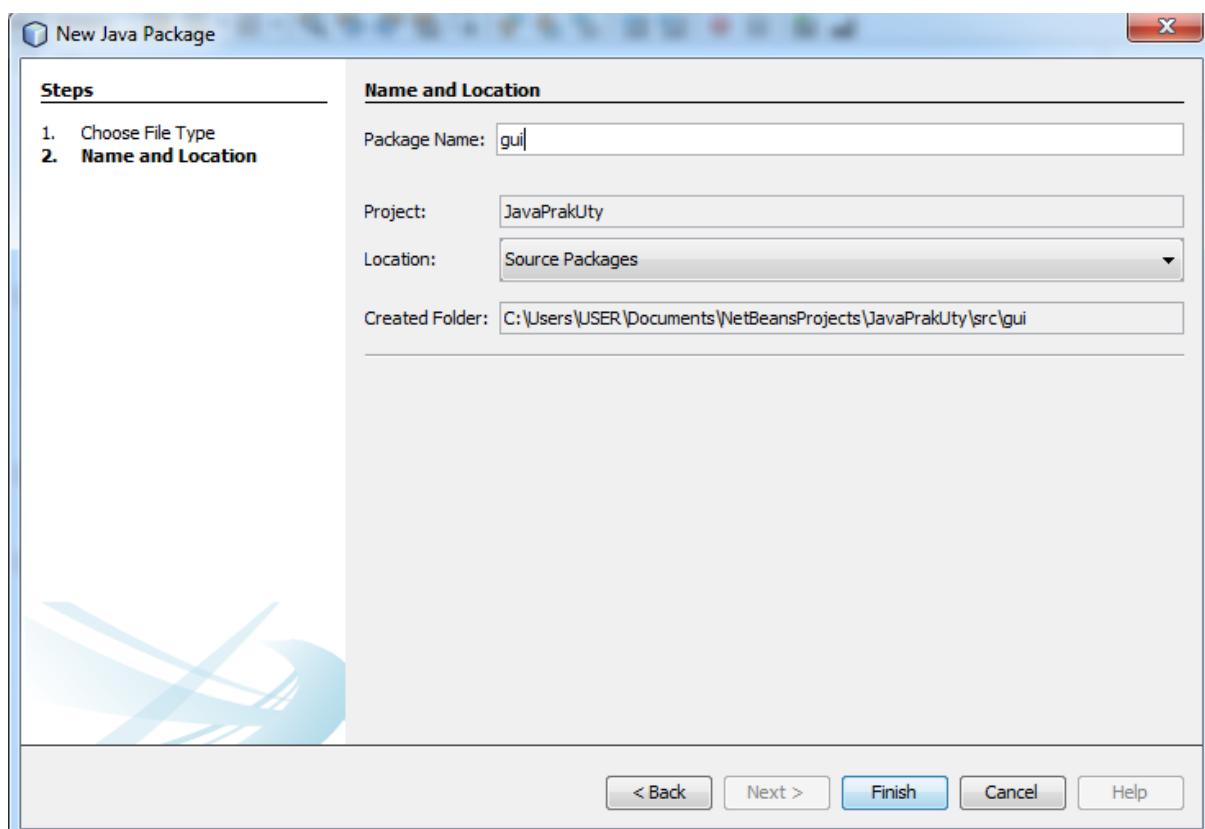
2.Beri nama Projectnya JavaPrakUty dan Klick Finish



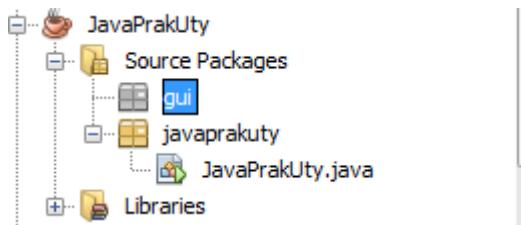
### 3.Klick kanan source packages new java packages



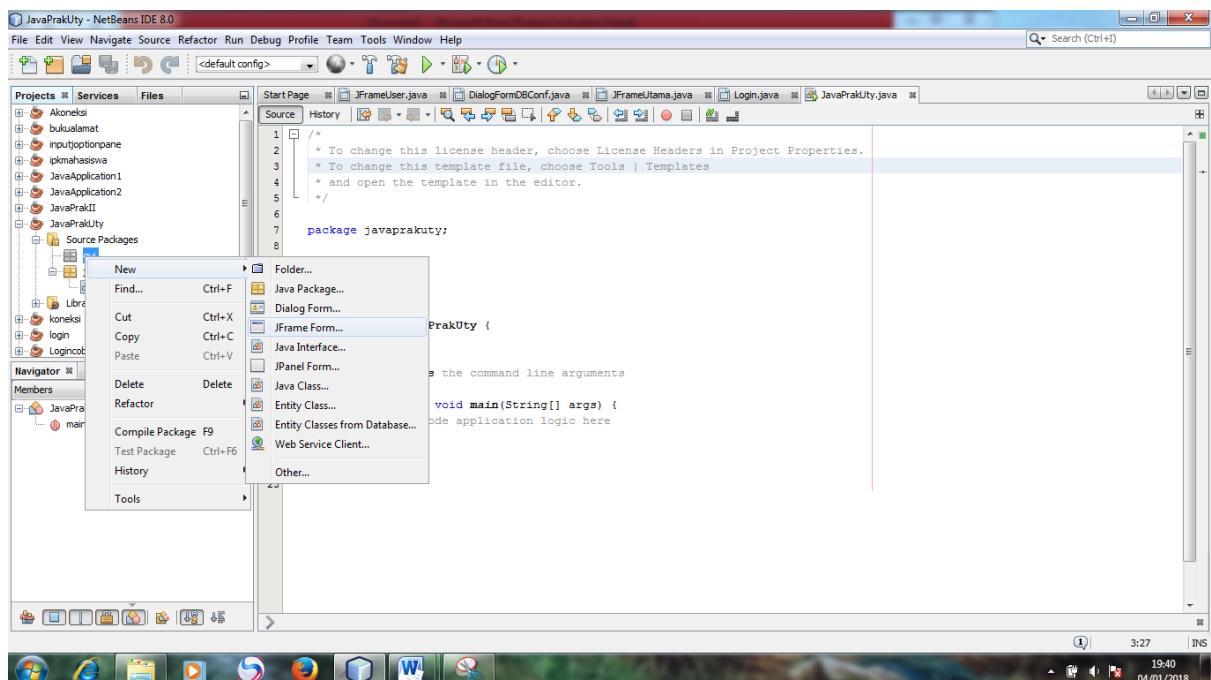
### 4.package baru gui dan klick finish



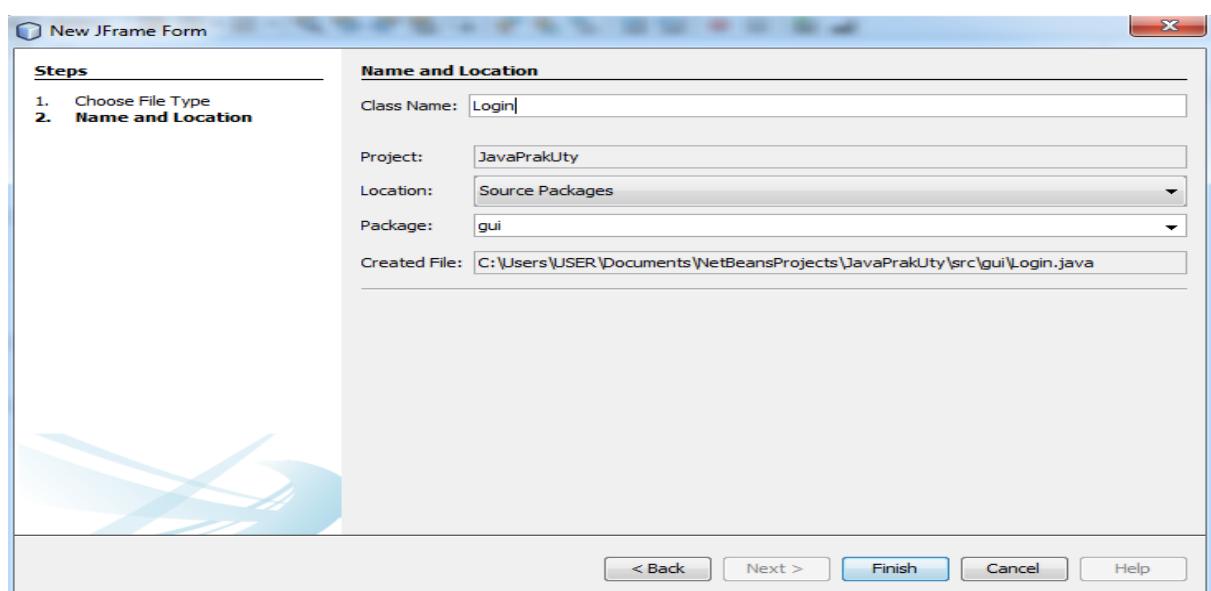
## 5. Hasilnya



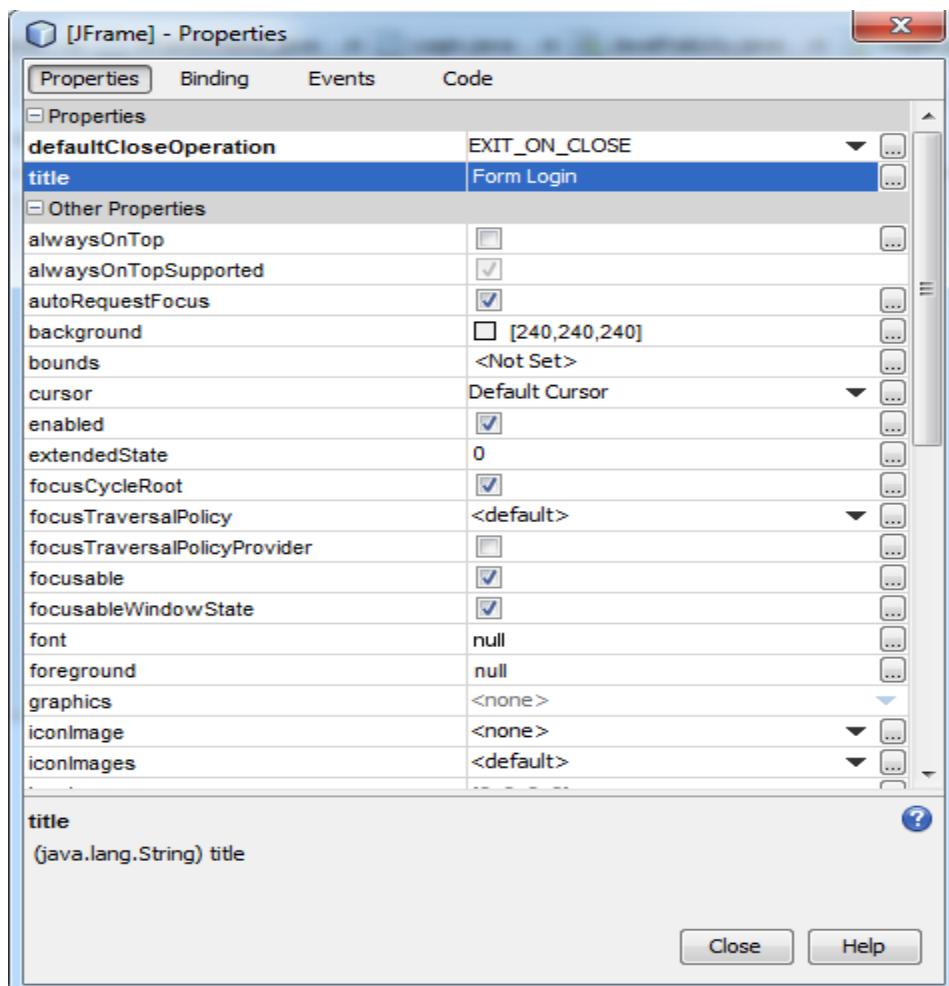
## 6. klick kanan package gui



## 7. buat from jrame dan beri nama Login dan klick finish



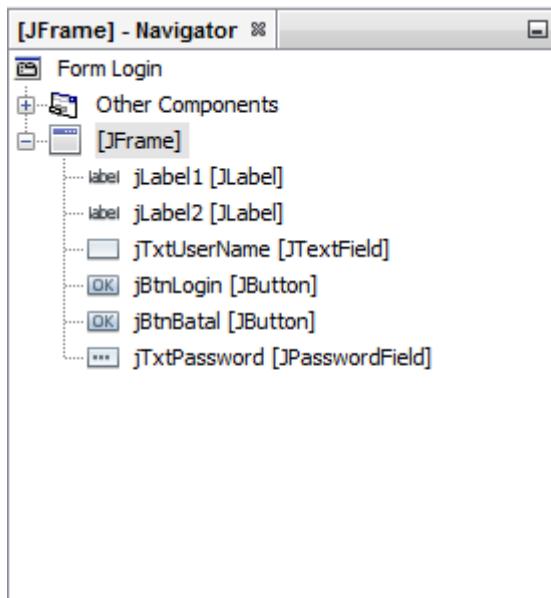
8.klick kanan jform properties title Form Login



9.inputkan button, label, text field dan password field



## 10. Merubah Variable



## 11. Harus Di hapus karena akan Menggunakan satu class Utama

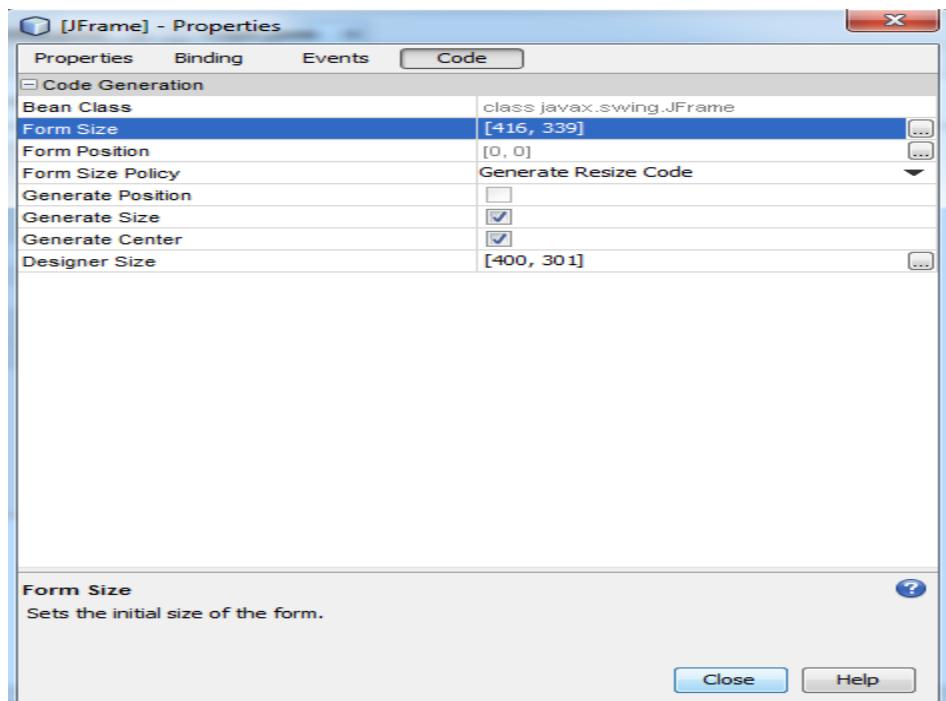
```
96
97  /**
98  * @param args the command line arguments
99  */
100 public static void main(String args[]) {
101     /* Set the Nimbus look and feel */
102     Look and feel setting code (optional)
123
124     ...
125     ...
126     ...
127     ...
128     ...
129     ...
130 }
131 }
```

## 12 tuliskan.Source code

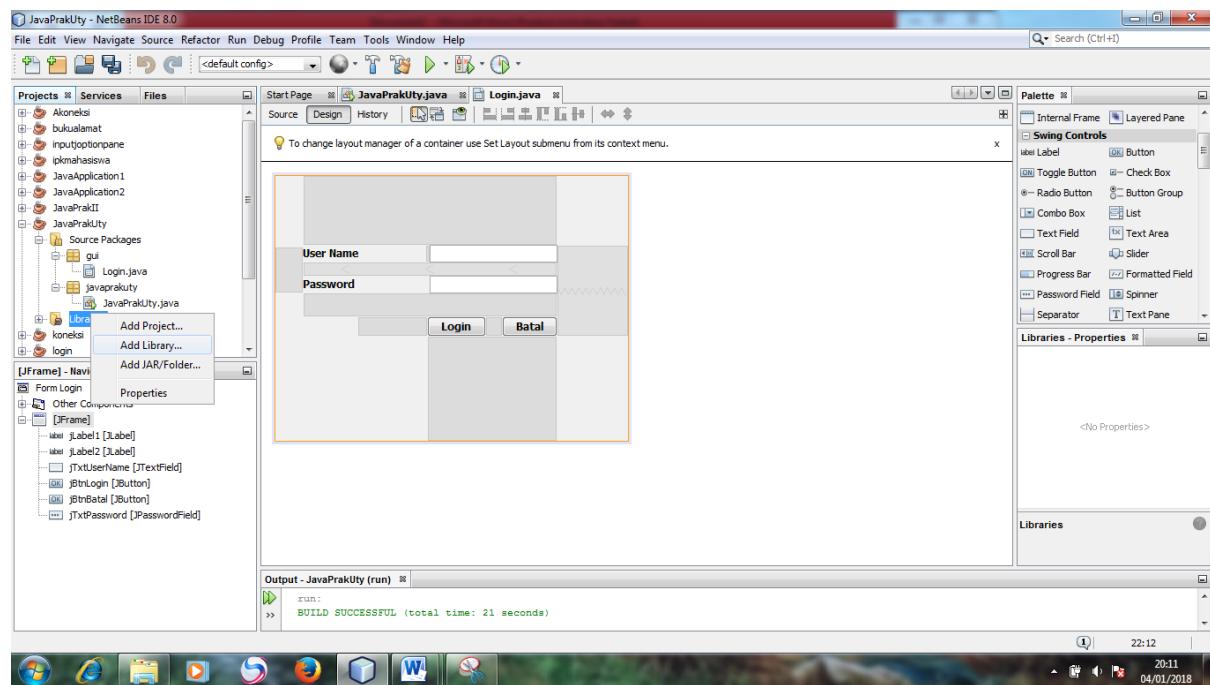
The screenshot shows a Java IDE interface with two tabs open: "JavaPrakUty.java" and "Login.java". The "JavaPrakUty.java" tab is active, displaying the following code:

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6
7 package javaprakuty;
8
9 import gui.Login;
10
11 /**
12 *
13 * @author USER
14 */
15 public class JavaPrakUty {
16
17     /**
18      * @param args the command line arguments
19     */
20     public static void main(String[] args) {
21         Login lgn = new Login();
22         lgn.setVisible(true);
23     }
24
25 }
26
```

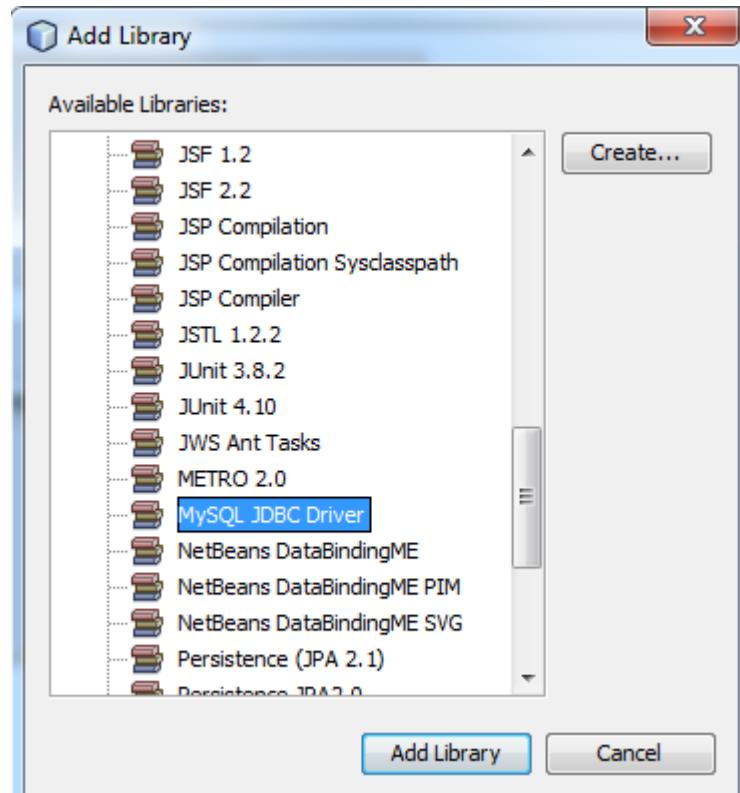
## 13.Pengaturan form Login di tengah



#### 14.klick kanan dan pilih add library



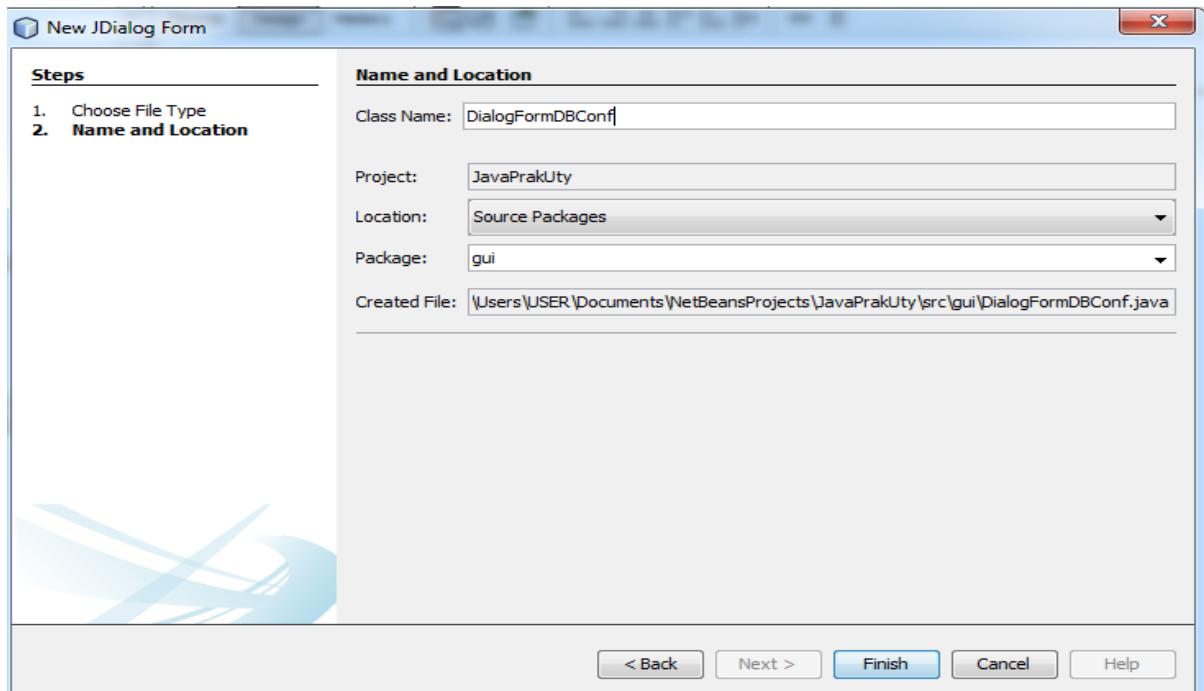
#### 15.pilih MySQL JDBC Driver dan klick Add Library



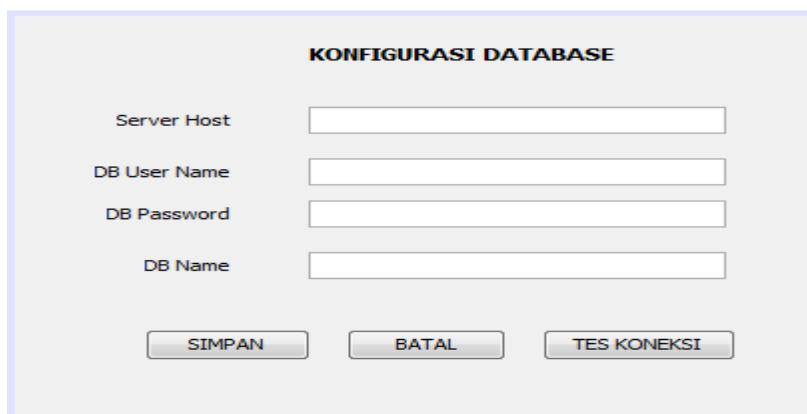
15.Tampilannya



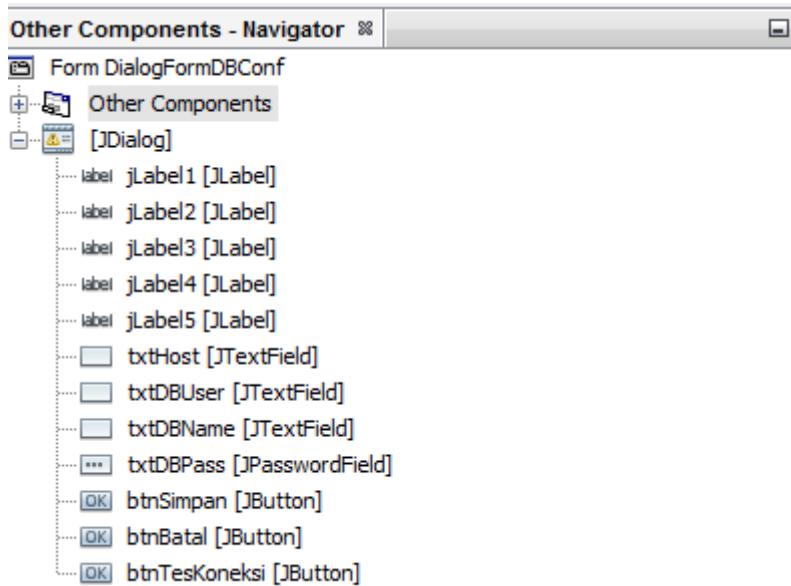
16.klick kanan package gui dan pilih JDIALOG Form Beri Nama DialogFormDBConf



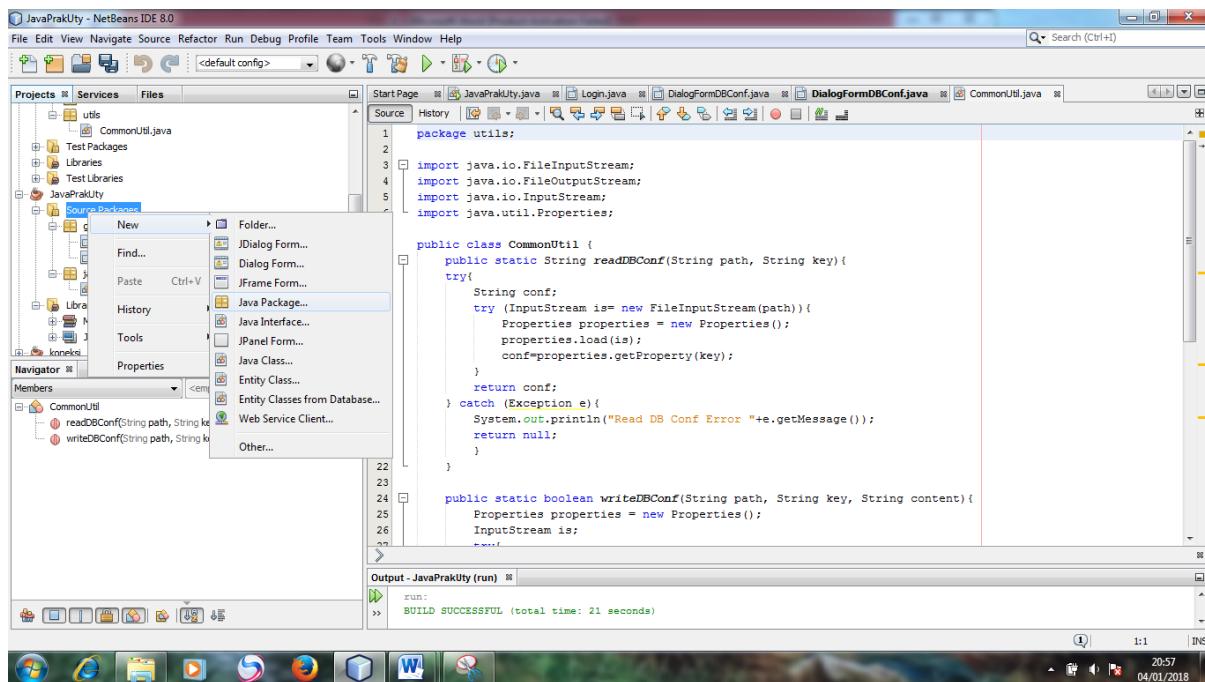
17.Inputkan 5 label, 3 text field, 1 Password field, 3 Button



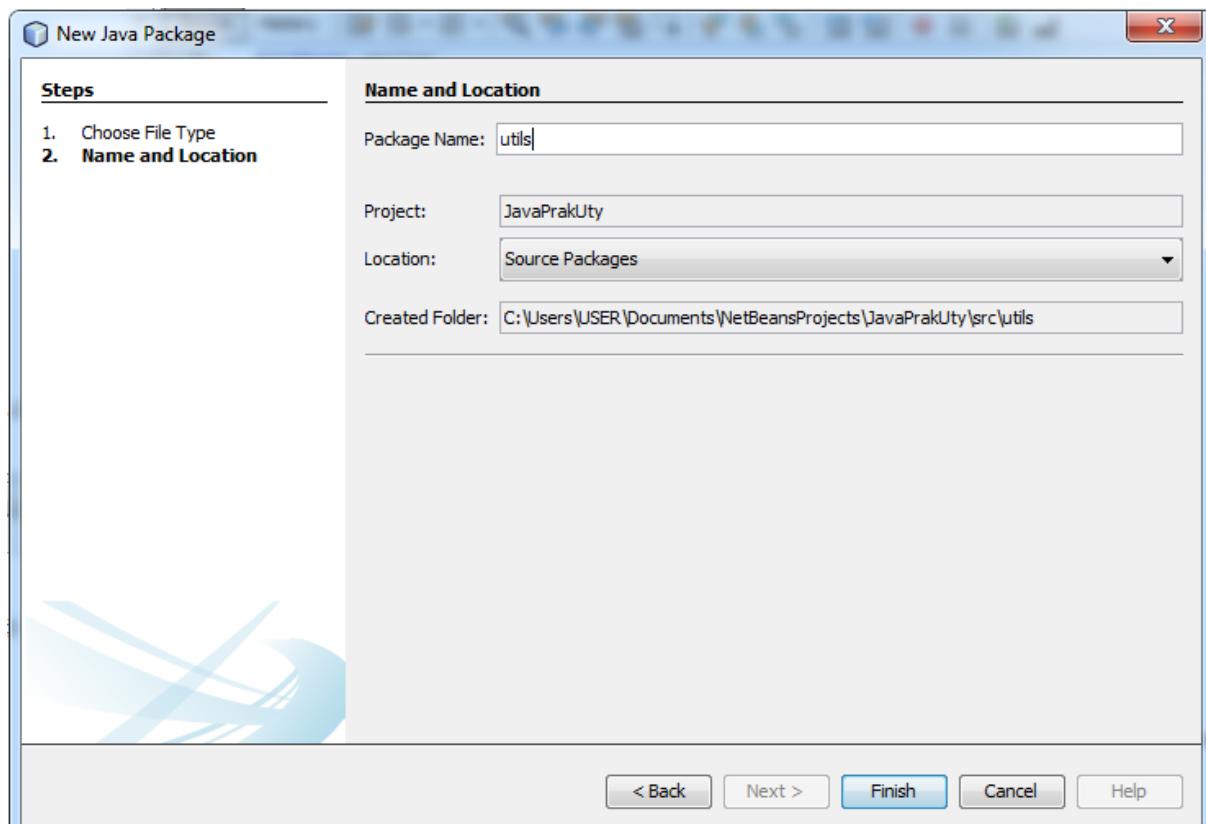
## 18. Merubah Variable JDialog



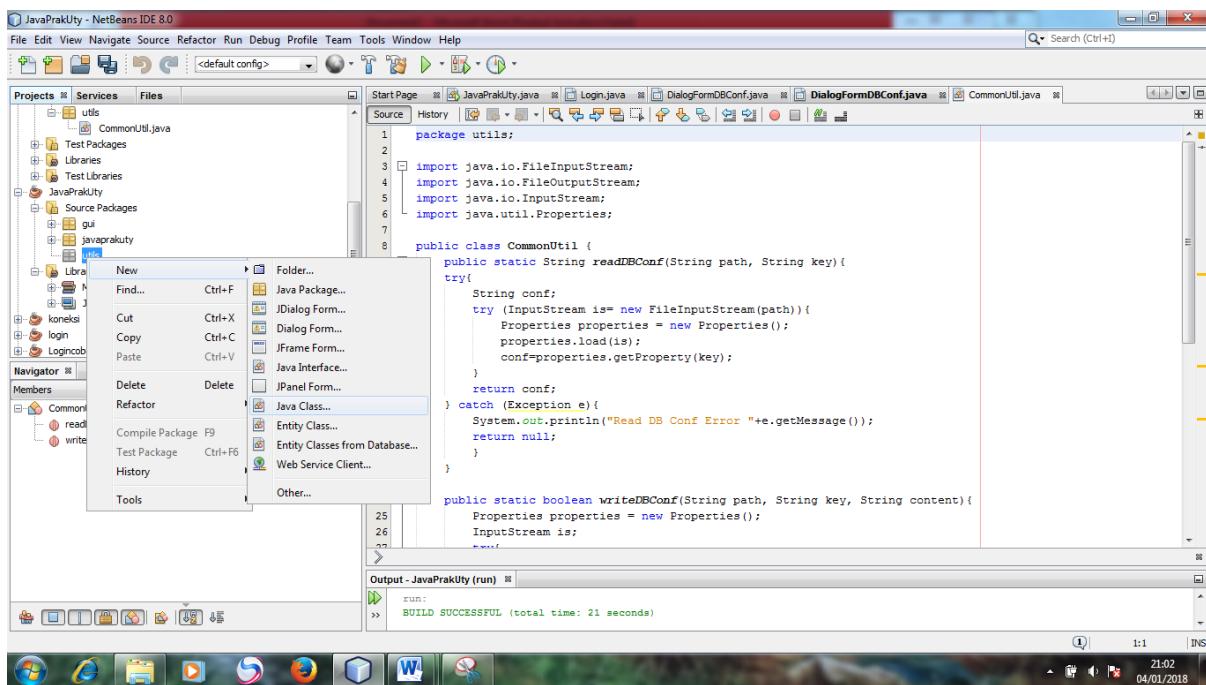
## 19. Buat Package baru dan beri nama utils



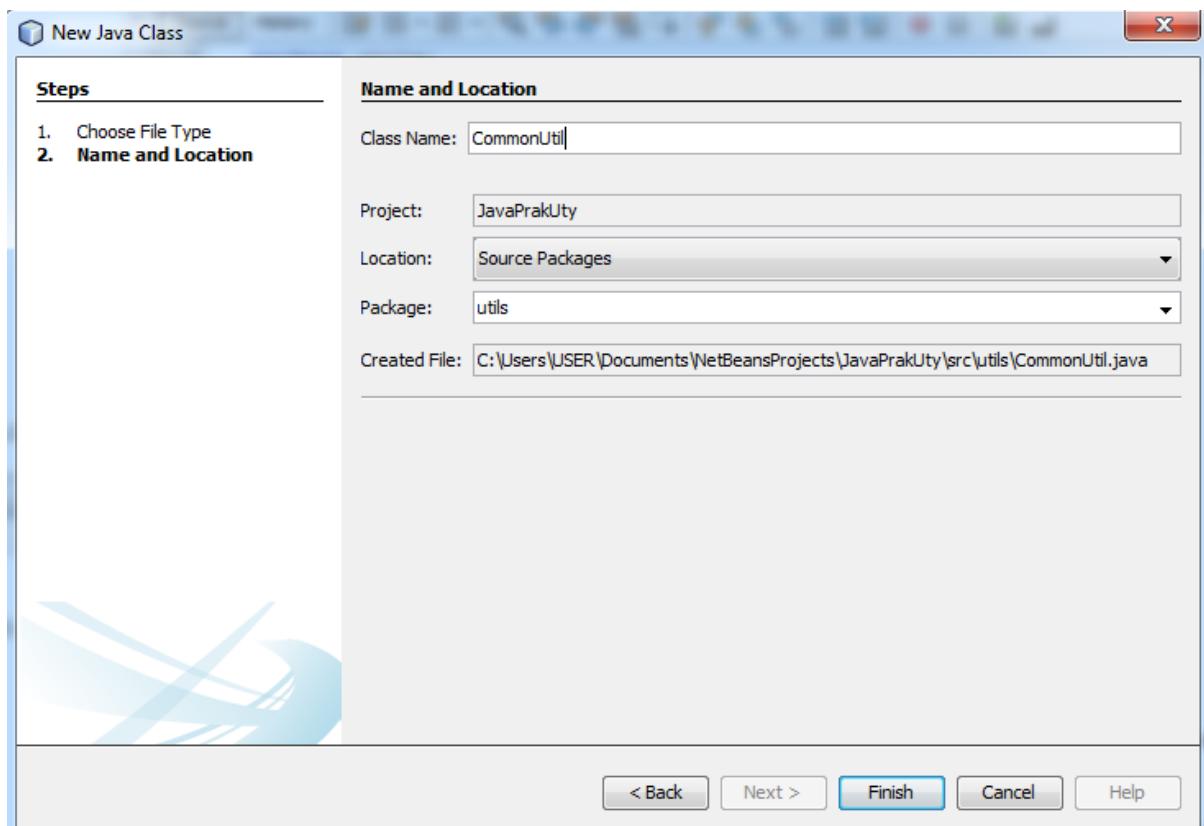
## 20.klick finish



## 21.Buat Package baru



## 22.Beri Nama CommonUtil dan Finish

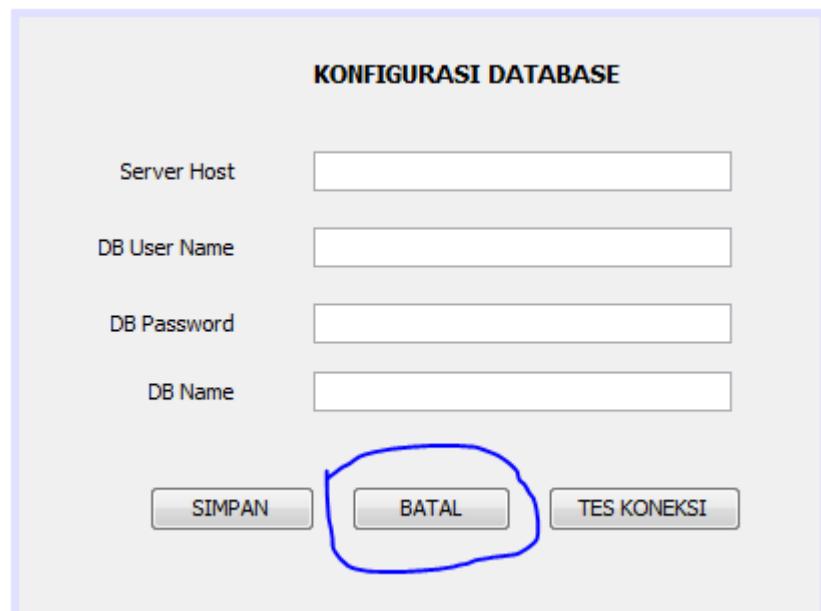


## 23.Tuliskan source kode tidak perlu semua di tuliskan karena otomatis terinput import

```
4  import java.io.FileInputStream;
5  import java.io.FileOutputStream;
6  import java.io.InputStream;
7  import java.util.Properties;
8
9
10
11
12
13
14 public class CommonUtil {
15     public static String readDBConf(String path, String key) {
16         try{
17             String conf;
18             try (InputStream is= new FileInputStream(path)) {
19                 Properties properties = new Properties();
20                 properties.load(is);
21                 conf=properties.getProperty(key);
22             }
23             return conf;
24         } catch (Exception e){
25             System.out.println("Read DB Conf Error "+e.getMessage());
26             return null;
27         }
28     }
29
30     public static boolean writeDBConf(String path, String key, String content) {
31         Properties properties = new Properties();
32         InputStream is;
33         try{
34             is = new FileInputStream(path);
35             properties.load(is);
36         } catch (Exception e){
37             System.out.println("Path Error"+e.getMessage());
38         }
39         properties.setProperty(key, content);
40         try{
41             properties.store(new FileOutputStream(path), "Config Success");
42             return true;
43         }catch(Exception e){
44             System.out.println("Write DB Conf Error "+e.getMessage());
45             return false;
46         }
47     }
48 }
```

24.Tuliskan Source Tombol Batal pada

```
168  
169     private void btnBatalActionPerformed(java.awt.event.ActionEvent evt) {  
170         System.exit(0);  
171     }
```



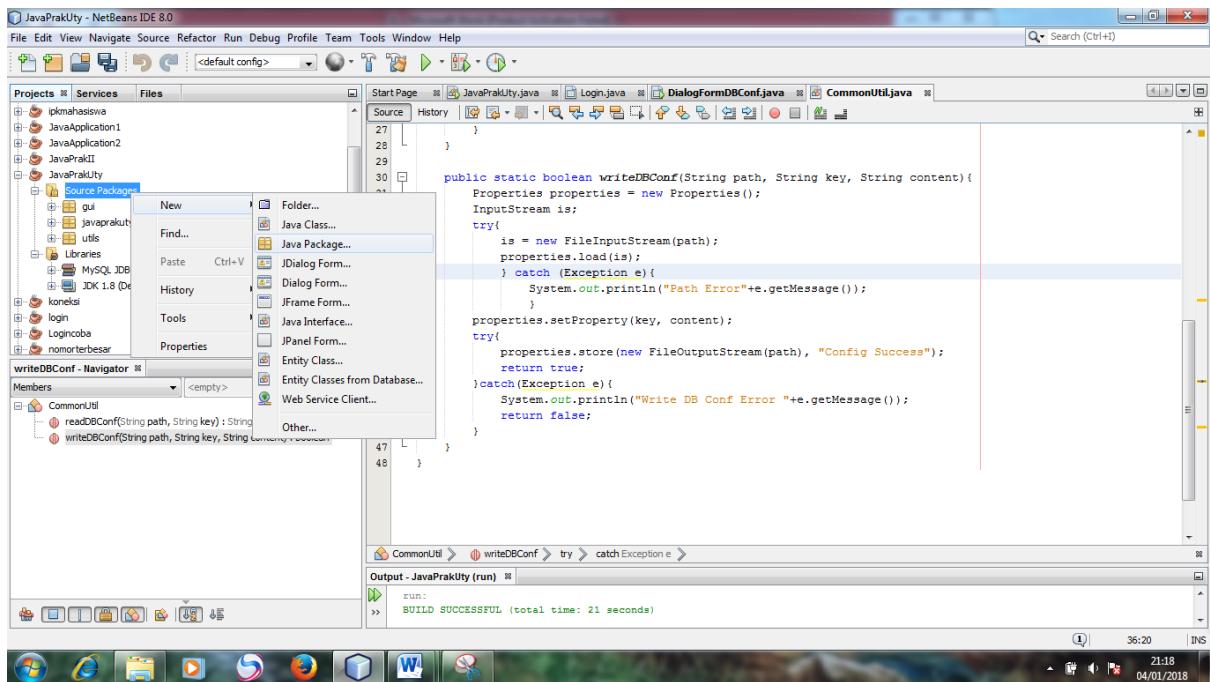
```
1 package gui;  
2  
3 import dao.DBConnection;  
4 import javax.swing.JOptionPane;  
5 import utils.CommonUtil;  
6  
7 /**  
8 *  
9 * @author Danu  
10 */  
11 public class DialogFormDBConf extends javax.swing.JDialog {  
12  
13     /**  
14      * Creates new form DialogFormDBConf  
15      */  
16     public DialogFormDBConf(java.awt.Frame parent, boolean modal) {  
17         super(parent, modal);  
18         initComponents();  
19     }  
20  
21     /**  
22      * This method is called from within the constructor to initialize the form.  
23      * WARNING: Do NOT modify this code. The content of this method is always  
24      * regenerated by the Form Editor.  
25      */  
26     @SuppressWarnings("unchecked")  
27     Generated Code
```

```

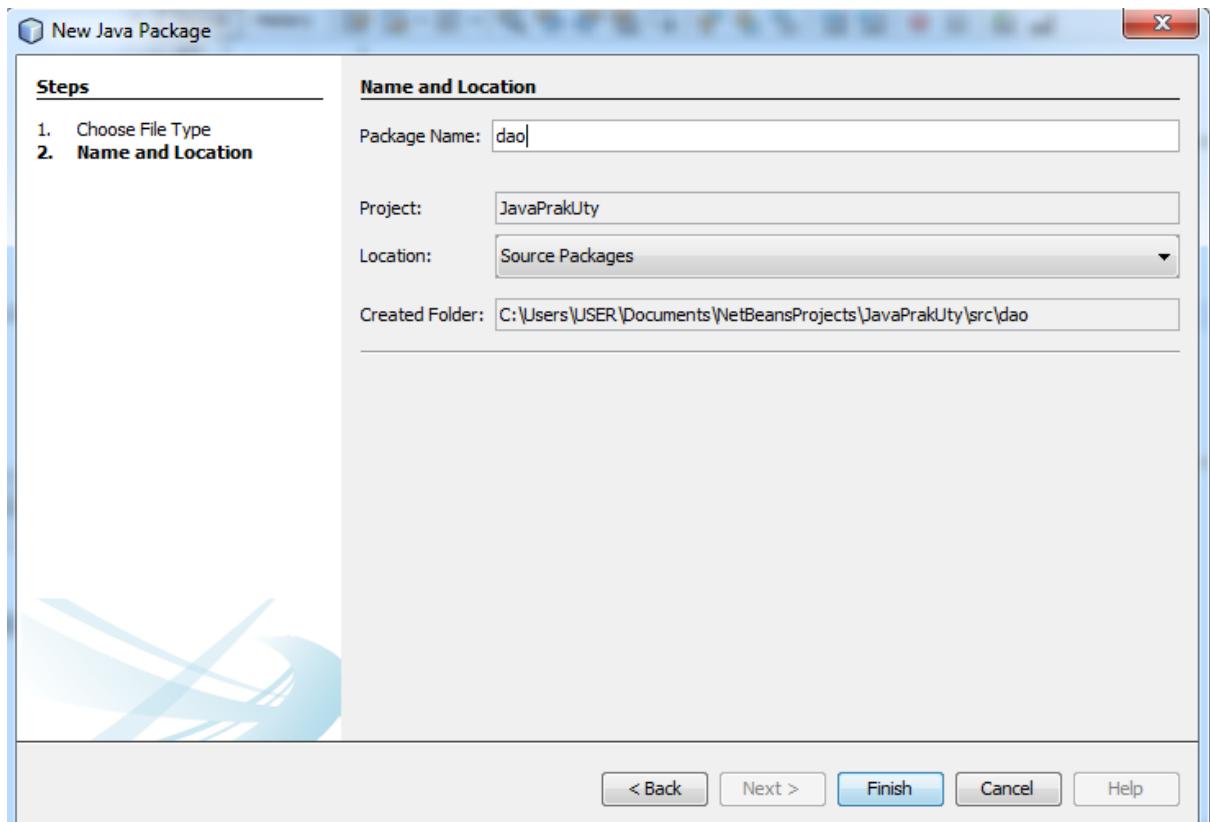
166     private void btnBatalActionPerformed(java.awt.event.ActionEvent evt) {
167         System.exit(0);
168     }
169
170     private void btnSimpanActionPerformed(java.awt.event.ActionEvent evt) {
171         CommonUtil.writeDBConf(Login.dbconf, "USERNAME", txtDBUser.getText());
172         CommonUtil.writeDBConf(Login.dbconf, "PASSWORD", new String(txtDBPass.getPassword()));
173         CommonUtil.writeDBConf(Login.dbconf, "URL", txtHost.getText());
174         CommonUtil.writeDBConf(Login.dbconf, "DATABASE", txtDBName.getText());
175         int jop= JOptionPane.showConfirmDialog(this, "Konfigurasi sudah disimpan", "INFORMATION", JOptionPane.OK_OPTION);
176         if (jop==0){
177             this.dispose();
178         }
179     }
180
181     private void btnTesKoneksiActionPerformed(java.awt.event.ActionEvent evt) {
182         String dbUser = txtDBUser.getText();
183         String dbPass = new String(txtDBPass.getPassword());
184         String dbName = txtDBName.getText();
185         String dbHost = txtHost.getText();
186         DBConnection conn = new DBConnection(dbUser, dbPass, dbName, dbHost);
187         if (conn.getDBConn() == null){
188             JOptionPane.showMessageDialog(null, "Koneksi Gagal, Detail: \n" + conn.getConError());
189         } else {
190             JOptionPane.showMessageDialog(null, "Koneksi sukses dilakukan");
191         }
192     }
193
194
195     // Variables declaration - do not modify
196     private javax.swing.JButton btnBatal;
197     private javax.swing.JButton btnSimpan;
198     private javax.swing.JButton btnTesKoneksi;
199     private javax.swing.JLabel jLabel1;
200     private javax.swing.JLabel jLabel2;
201     private javax.swing.JLabel jLabel3;
202     private javax.swing.JLabel jLabel4;
203     private javax.swing.JLabel jLabel5;
204     private javax.swing.JTextField txtDBName;
205     private javax.swing.JPasswordField txtDBPass;
206     private javax.swing.JTextField txtDBUser;
207     private javax.swing.JTextField txtHost;
208     // End of variables declaration
209 }
210

```

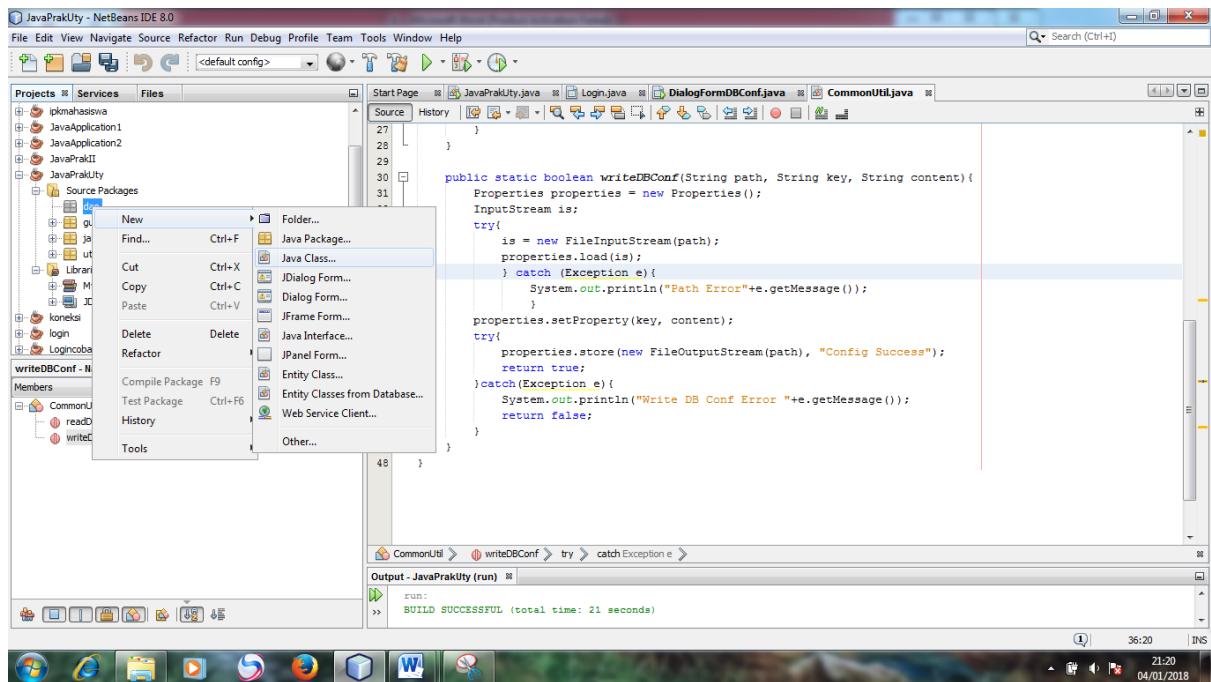
## 25.Buat Package Baru



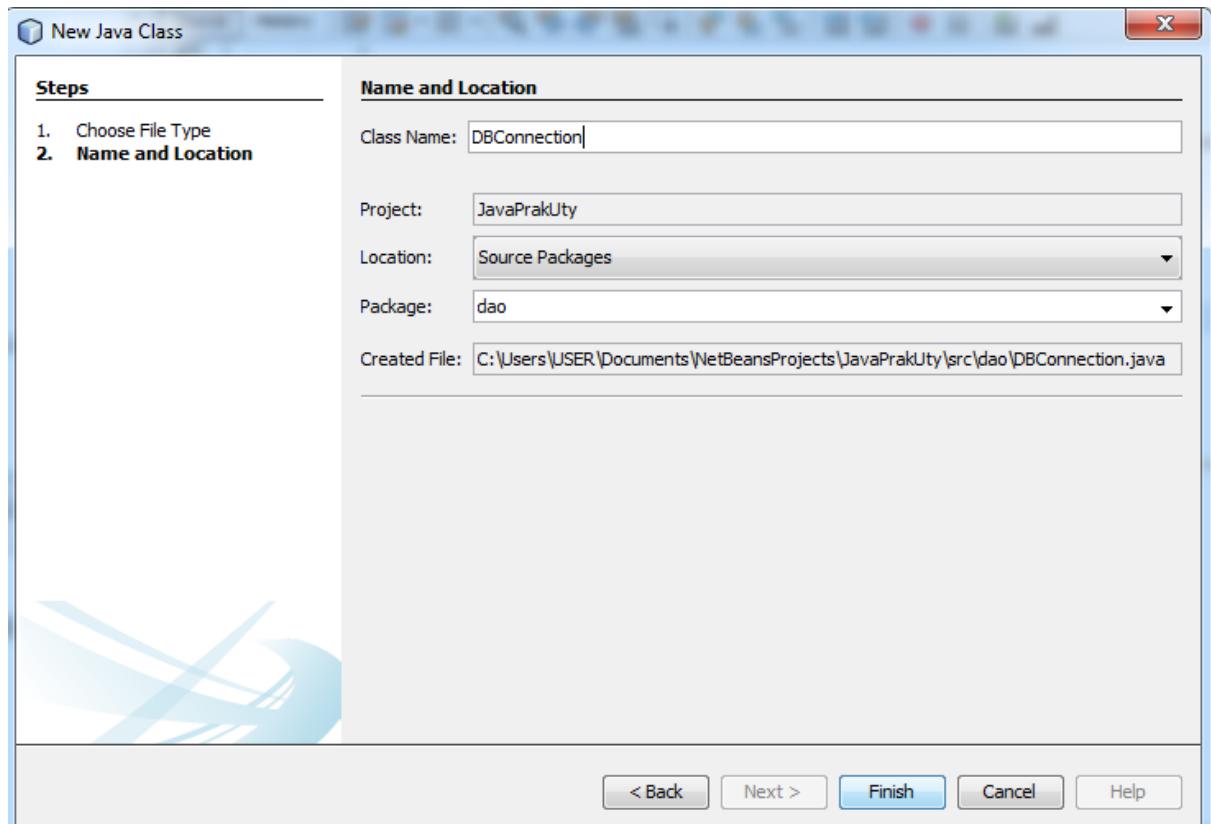
## 26.Di Berikan Nama dao dan klick finish



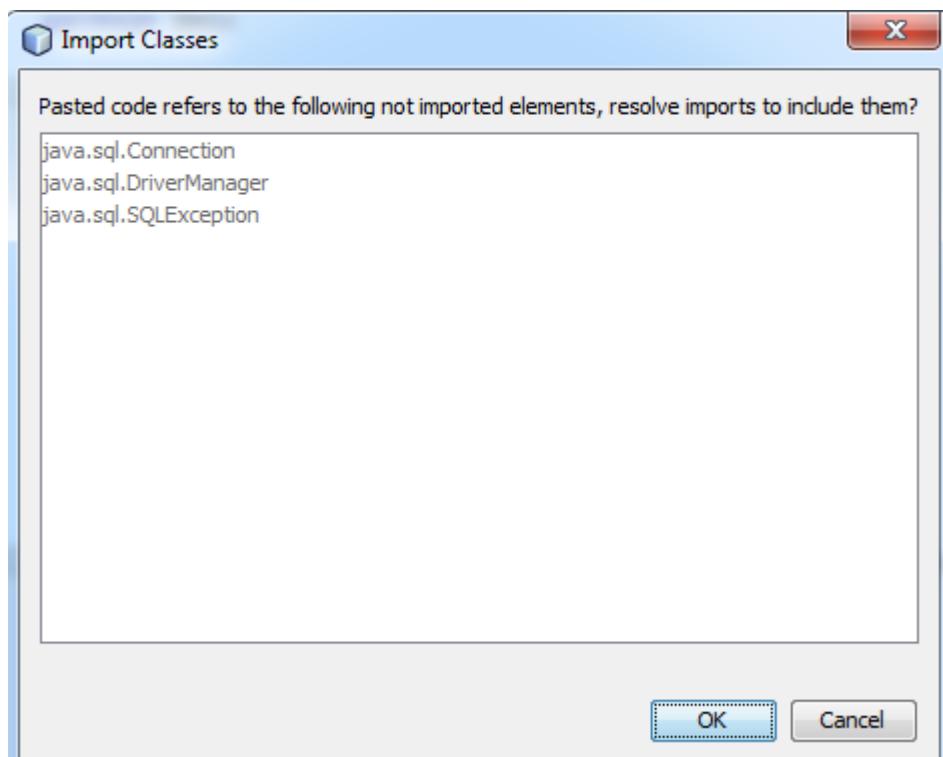
## 27.Buat Class baru pada package dao



## 28. Di Berikan Nama DBConnection



29. klick ok



30. Source code

The project tree shows a 'dao' package containing a 'DBConnection.java' file. The code for DBConnection.java is as follows:

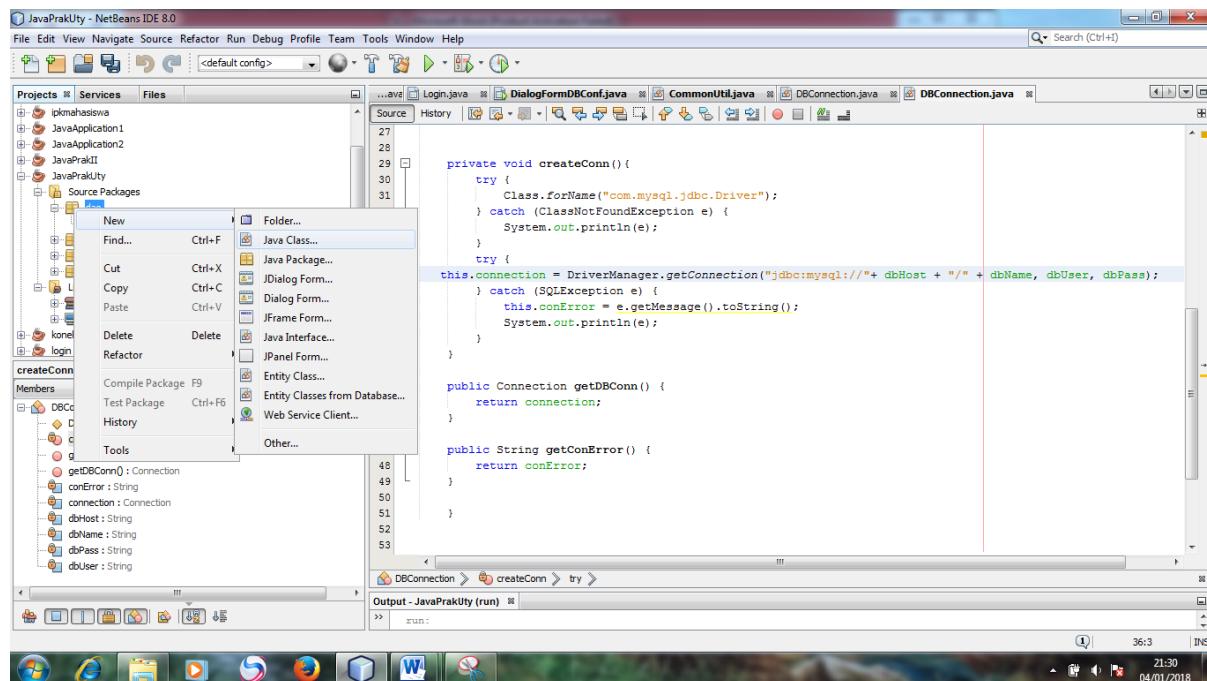
```
1 package dao;
2
3 import java.sql.Connection;
4 import java.sql.DriverManager;
5 import java.sql.SQLException;
6
7 /**
8 * 
9 * @author USER
10 */
11 public class DBConnection {
12     private final String dbUser;
13     private final String dbPass;
14     private final String dbName;
15     private final String dbHost;
16
17     private Connection connection = null;
18     private String conError;
19
20     public DBConnection(String dbUser, String dbPass, String dbName, String dbHost) {
21         this.dbUser = dbUser;
22         this.dbPass = dbPass;
23         this dbName = dbName;
24         this dbHost = dbHost;
25         createConn();
26     }
}
```

```

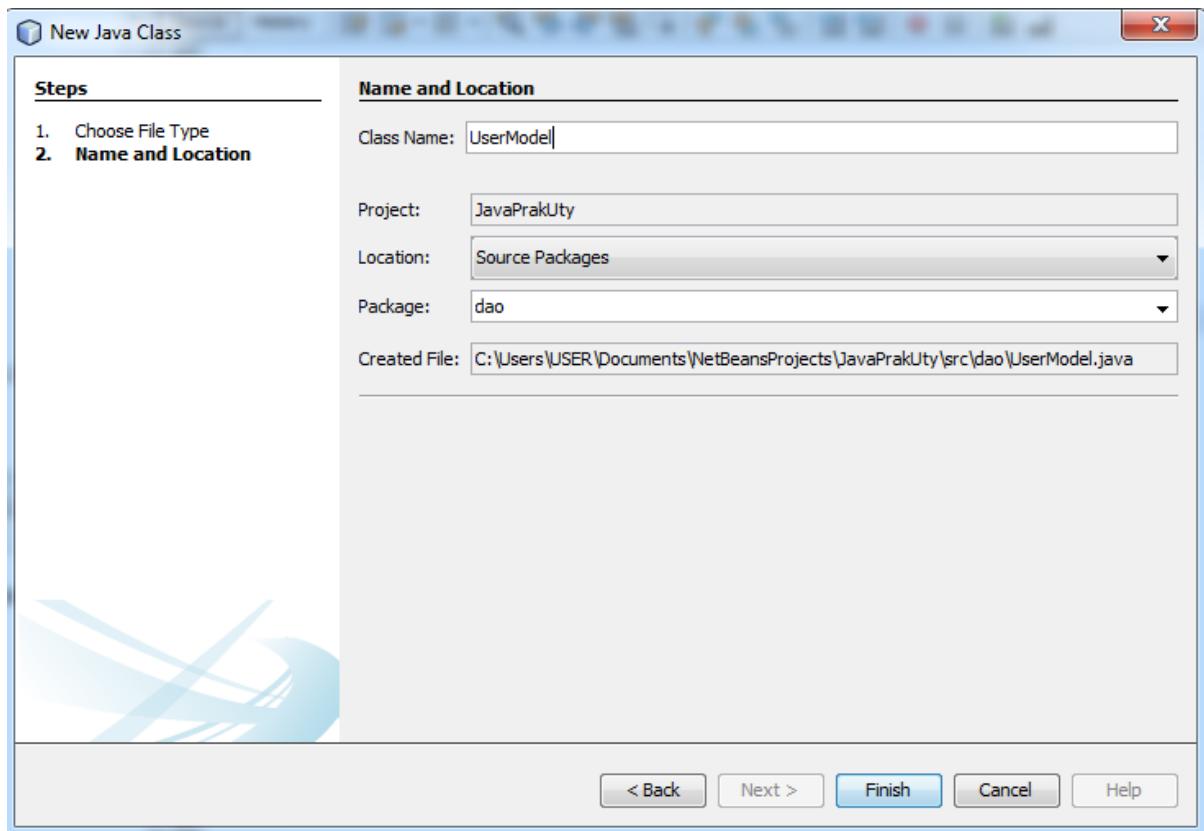
27
28
29     private void createConn() {
30         try {
31             Class.forName("com.mysql.jdbc.Driver");
32         } catch (ClassNotFoundException e) {
33             System.out.println(e);
34         }
35         try {
36             this.connection = DriverManager.getConnection("jdbc:mysql://" + dbHost + "/" + dbName, dbUser, dbPass);
37         } catch (SQLException e) {
38             this.conError = e.getMessage().toString();
39             System.out.println(e);
40         }
41     }
42
43     public Connection getDBConn() {
44         return connection;
45     }
46
47     public String getConError() {
48         return conError;
49     }
50
51 }
52

```

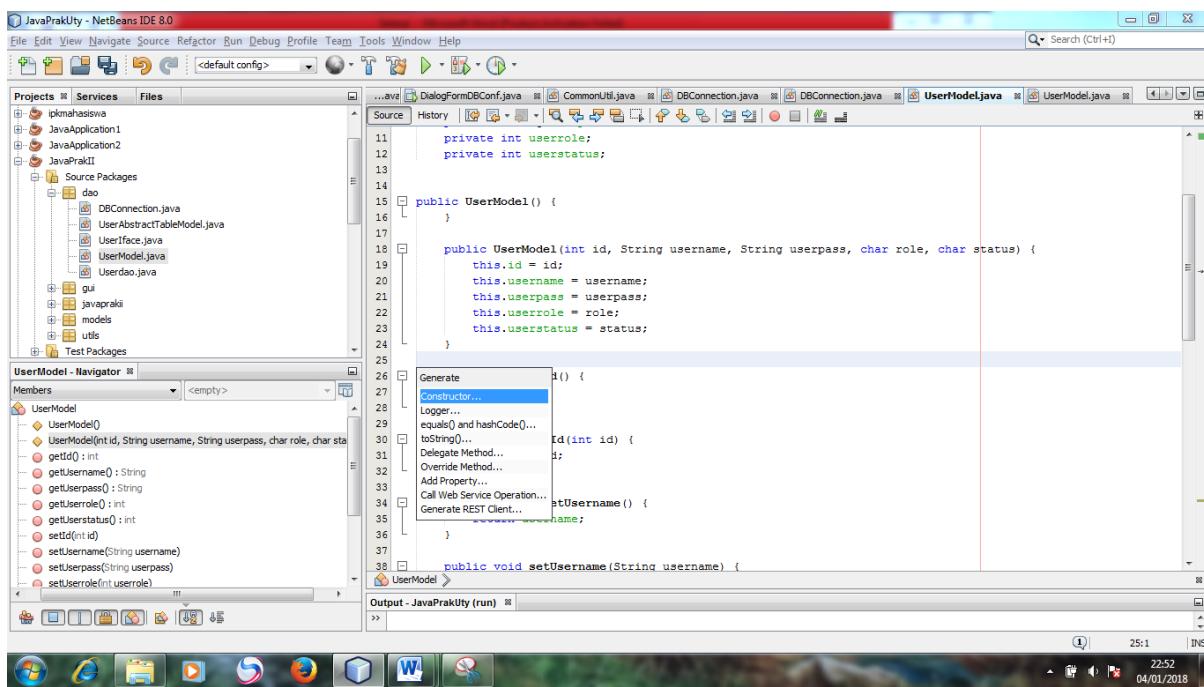
### 31.buat class baru pada package dao

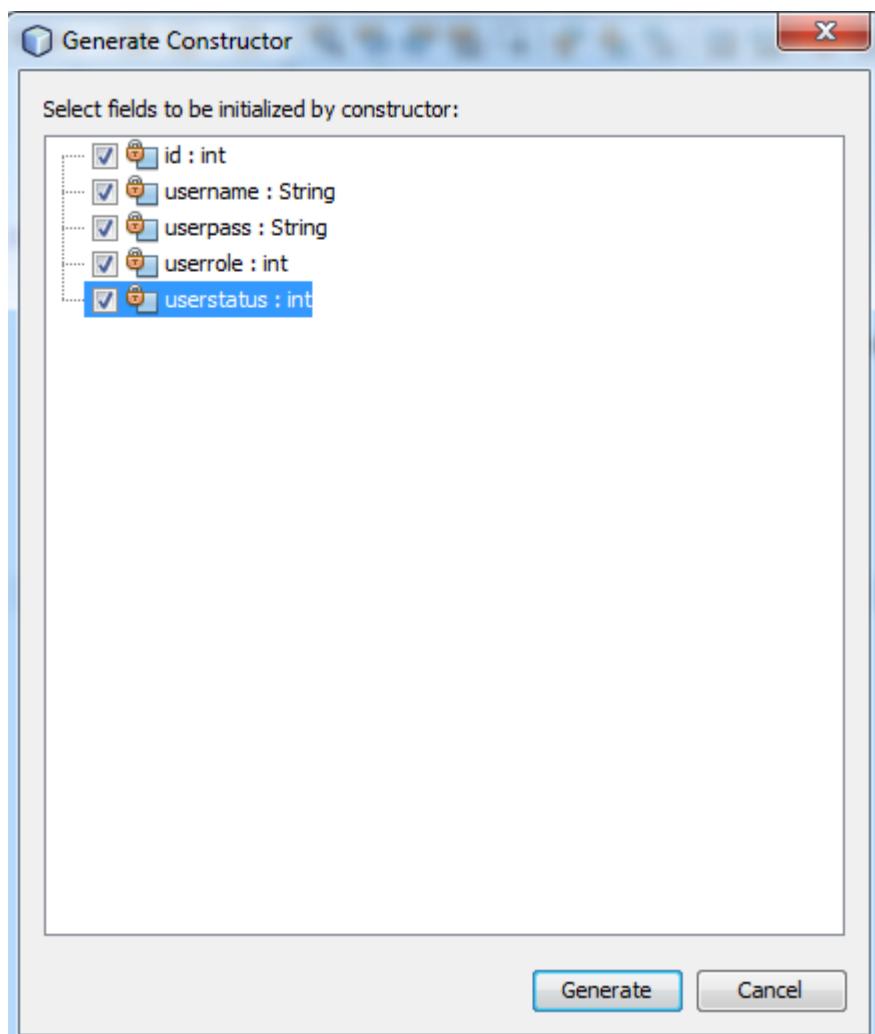


### 32.Di berikan Nama UserModel dan Klick finish

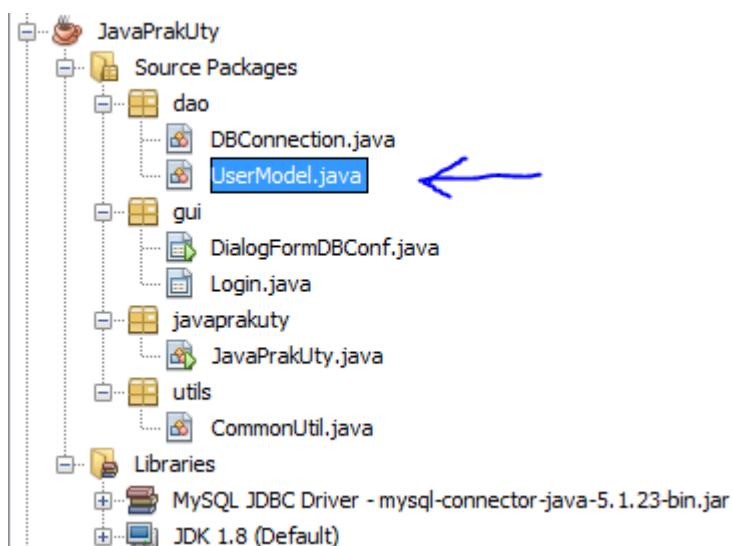


33. Disini menggunakan constructor alt+insert centang semua dan klick generate





### 34. Source code



```
1 package dao;
2
3 /**
4 *
5 * @author USER
6 */
7 public class UserModel {
8     private int id;
9     private String username;
10    private String userpass;
11    private int userrole;
12    private int userstatus;
13
14
15    public UserModel() {
16    }
17
18    public UserModel(int id, String username, String userpass, char role, char status) {
19        this.id = id;
20        this.username = username;
21        this.userpass = userpass;
22        this.userrole = role;
23        this.userstatus = status;
24    }
25
26    public int getId() {
27        return id;
28    }
```

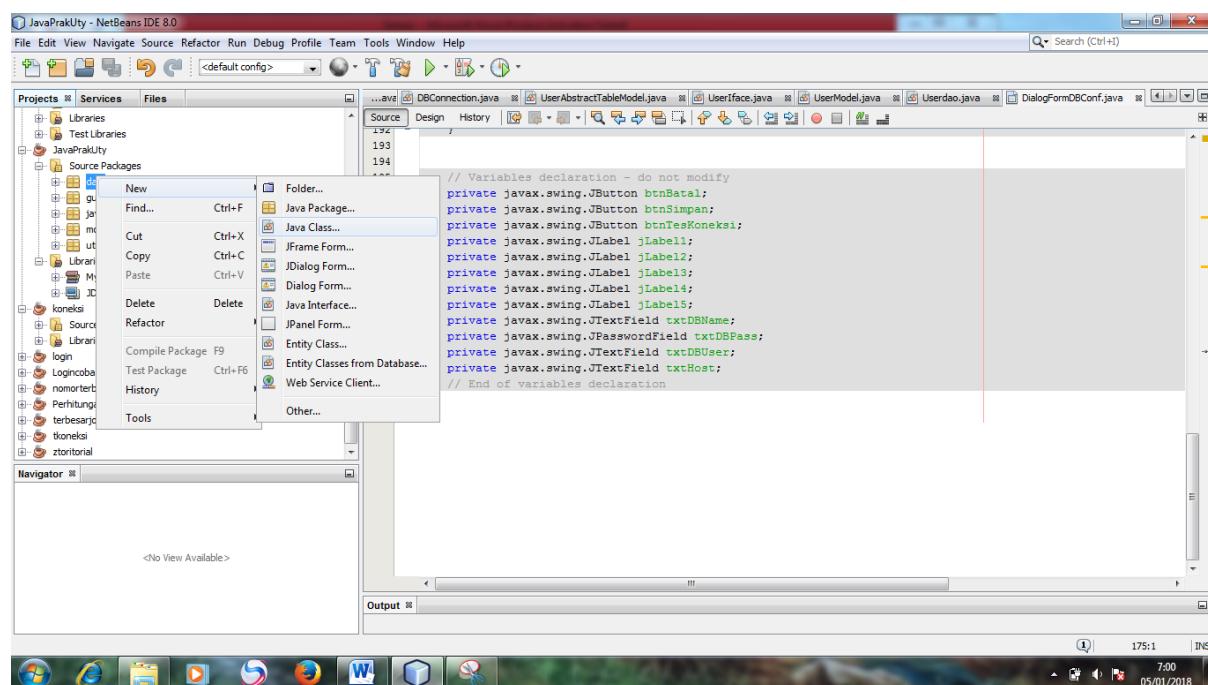
```
29
30    public void setId(int id) {
31        this.id = id;
32    }
33
34    public String getUsername() {
35        return username;
36    }
37
38    public void setUsername(String username) {
39        this.username = username;
40    }
41
42    public String getUserpass() {
43        return userpass;
44    }
45
46    public void setUserpass(String userpass) {
47        this.userpass = userpass;
48    }
49
50    public int getUserrole() {
51        return userrole;
52    }
53
54    public void setUserrole(int userrole) {
55        this.userrole = userrole;
56    }
```

```

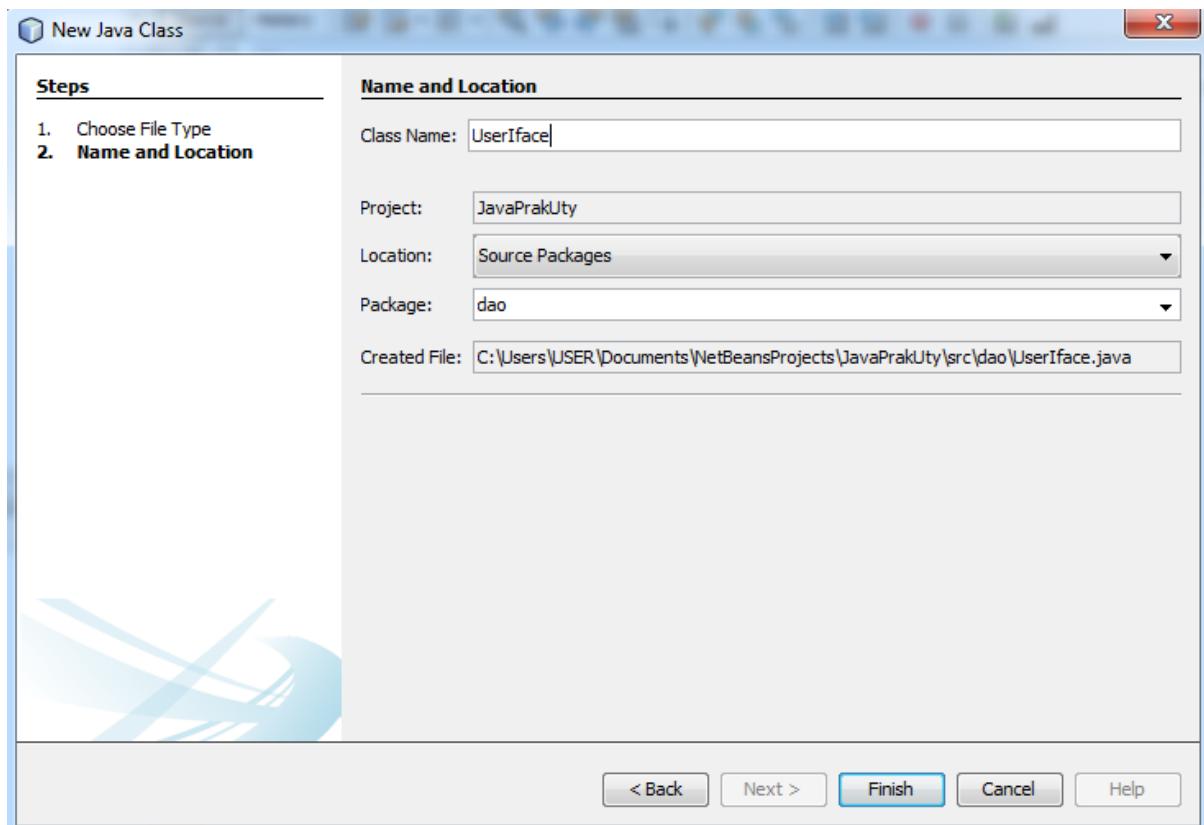
57
58     public int getUserstatus() {
59         return userstatus;
60     }
61
62     public void setUserstatus(int userstatus) {
63         this.userstatus = userstatus;
64     }
65
66
67
68 }
69

```

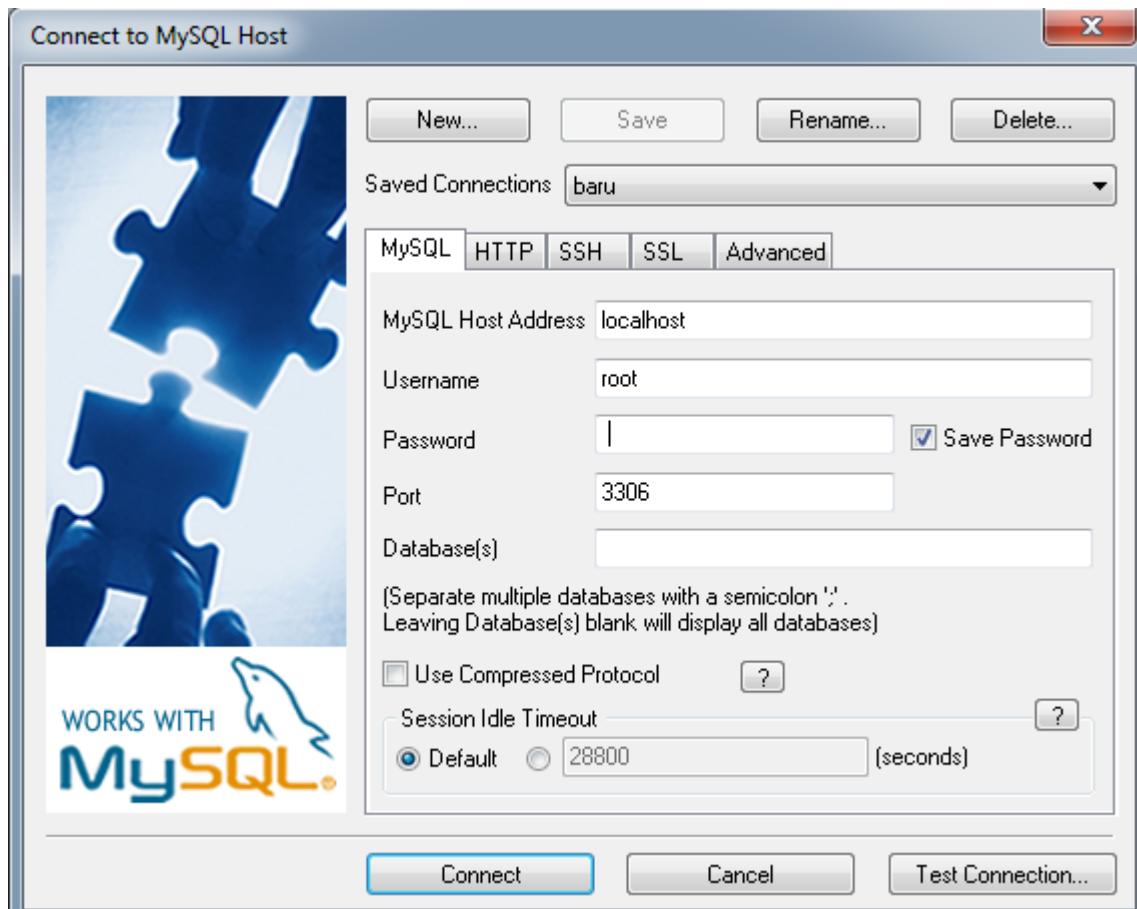
### 35. Buat class baru di dalam package dao



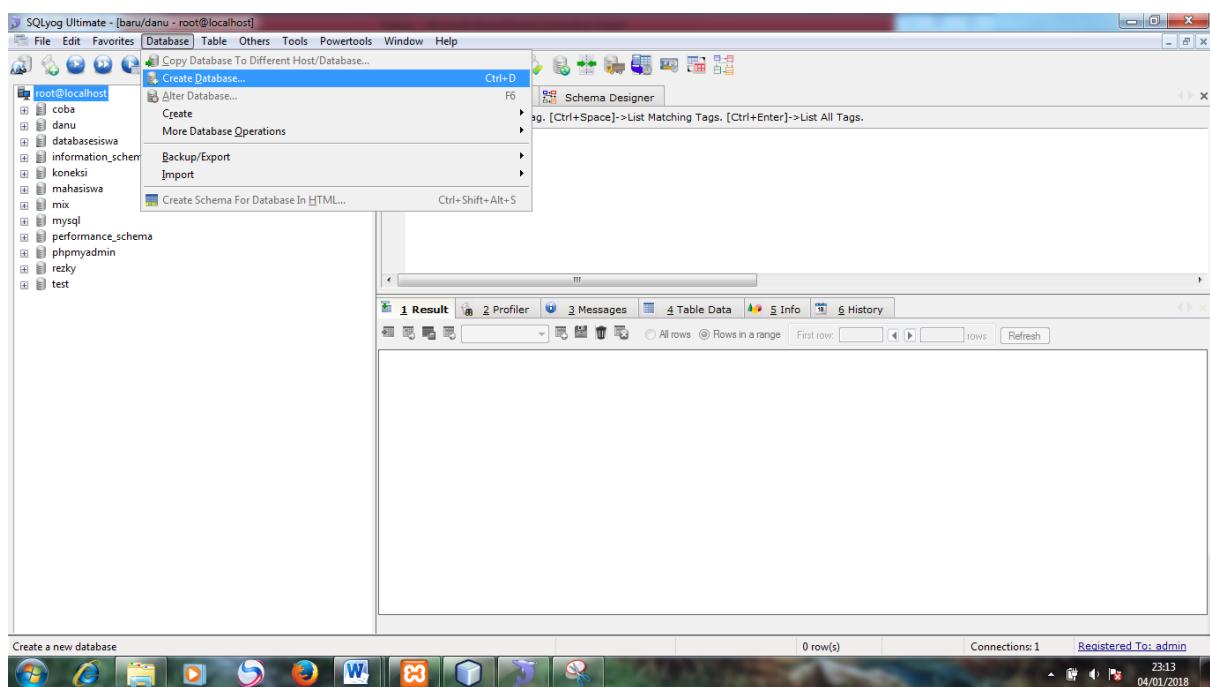
36.di beri nama UserInterface dan klick finish



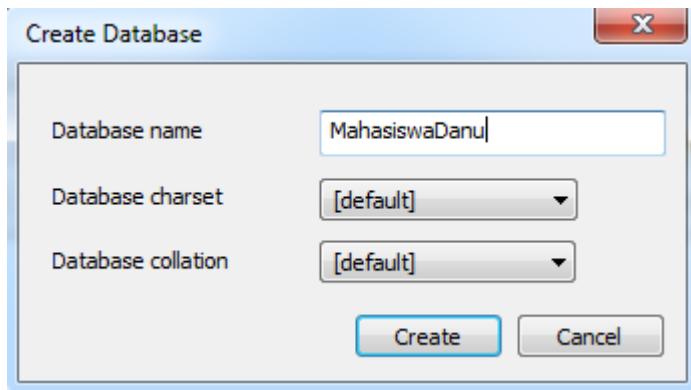
37.Buat data Base menggunakan MySql pastikan xamp my sql telah di aktifkan dan klick connect



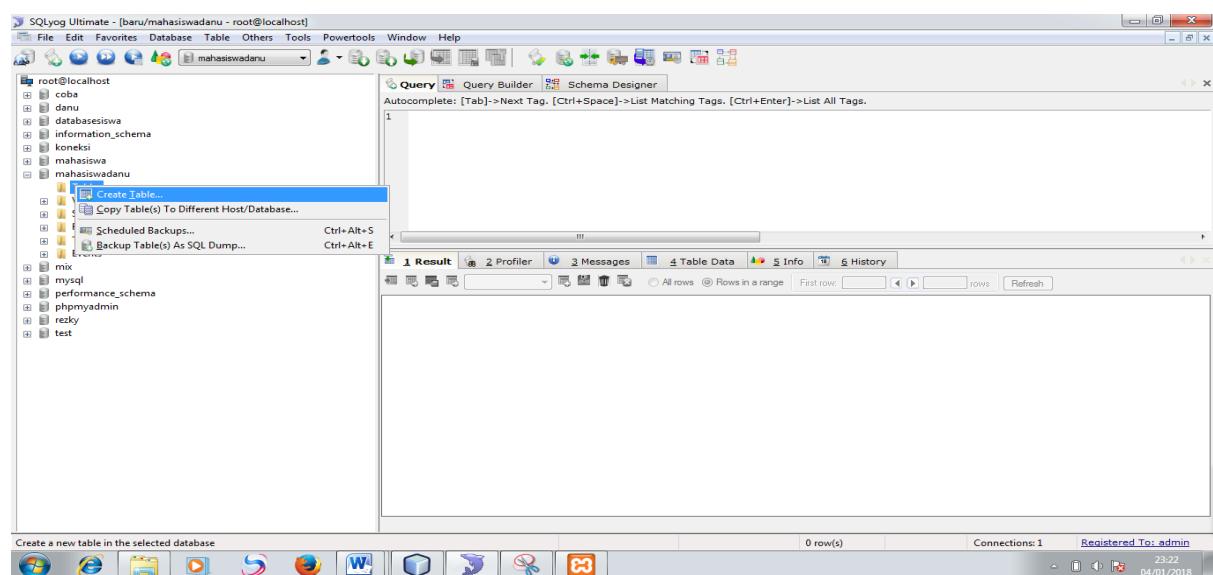
### 38.create DataBase



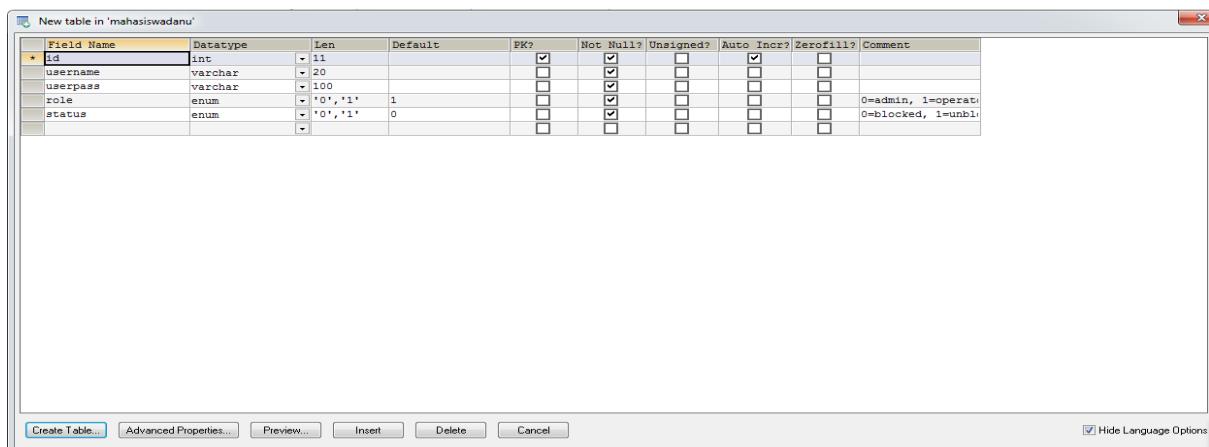
### 39.berikan Nama Data Base MahasiswaDanu



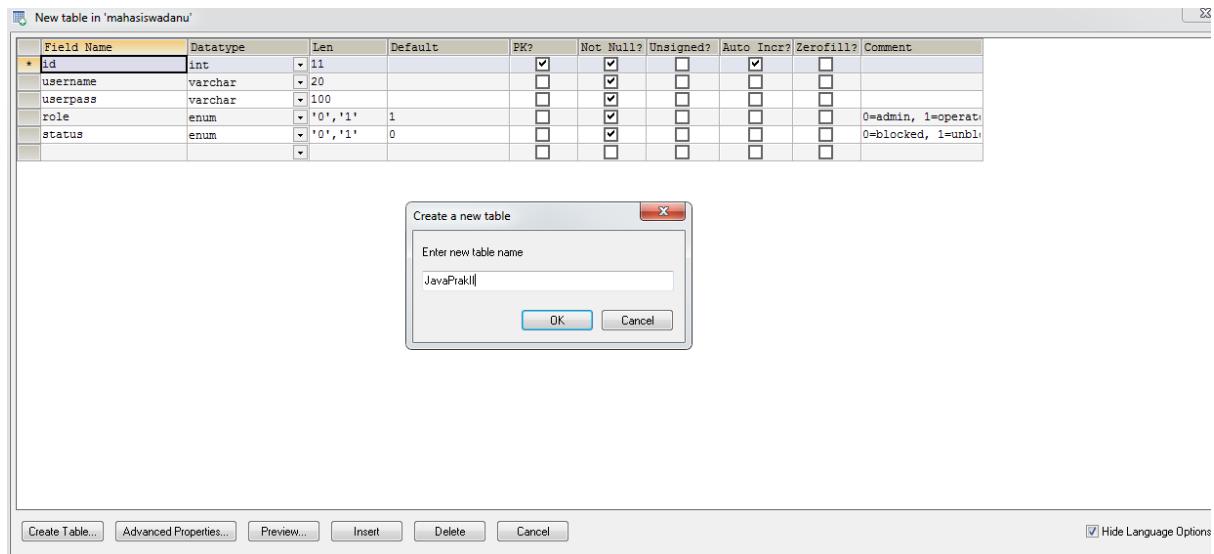
#### 40.Buat Table Baru



#### 41.Table DataBase



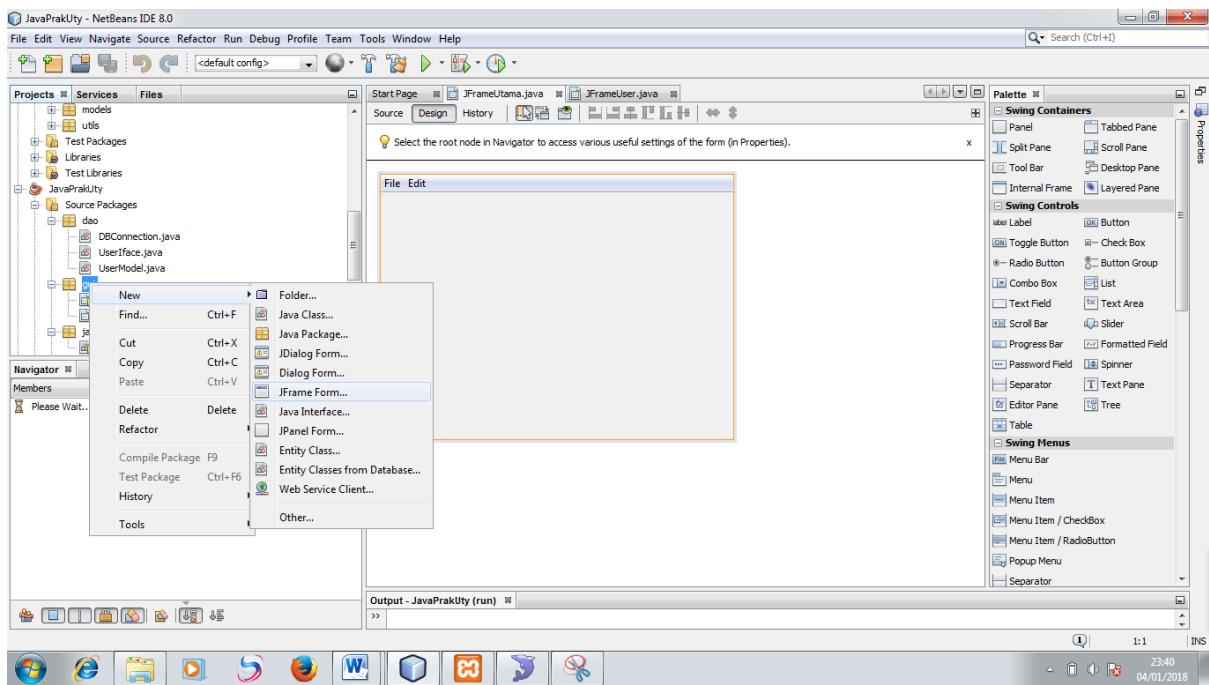
#### 42.klick ok



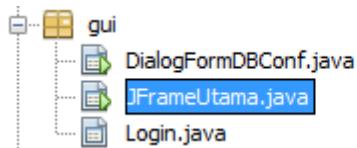
#### 43.untuk mengakses DataBase

	<b>id</b>	<b>username</b>	<b>userpass</b>	<b>role</b>	<b>status</b>
*	11111	Danu	12345	1	0
*	(NULL)	(NULL)	(NULL)	1	0

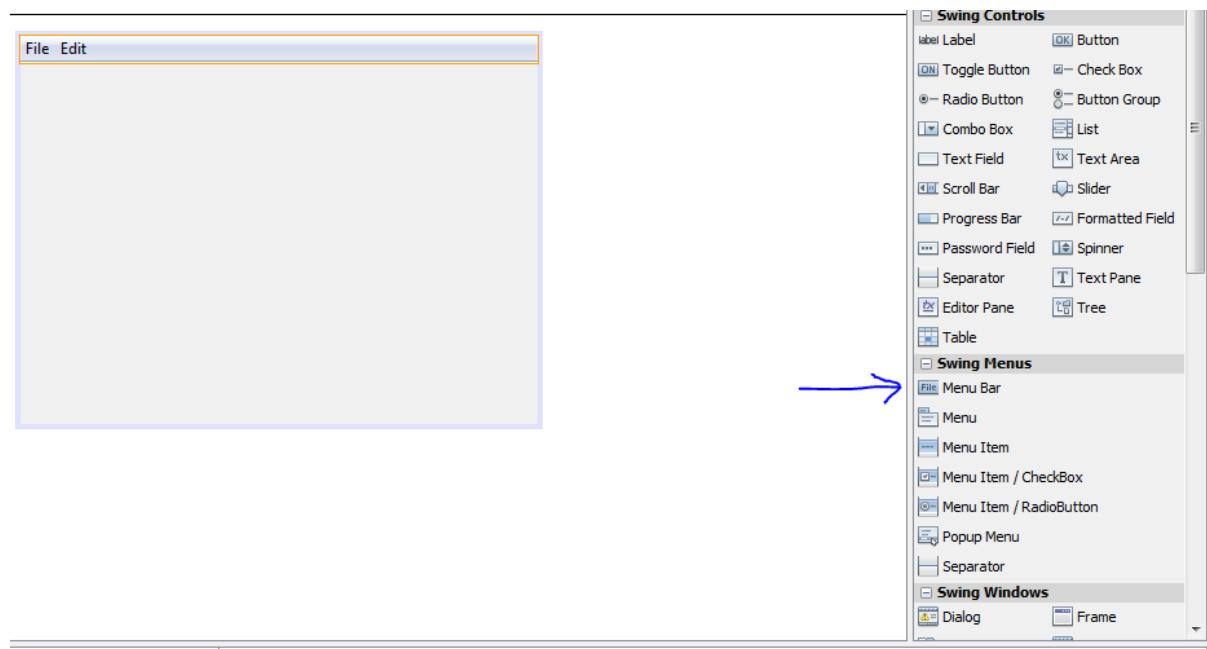
#### 44.Buat class baru jframe from di dalam package gui



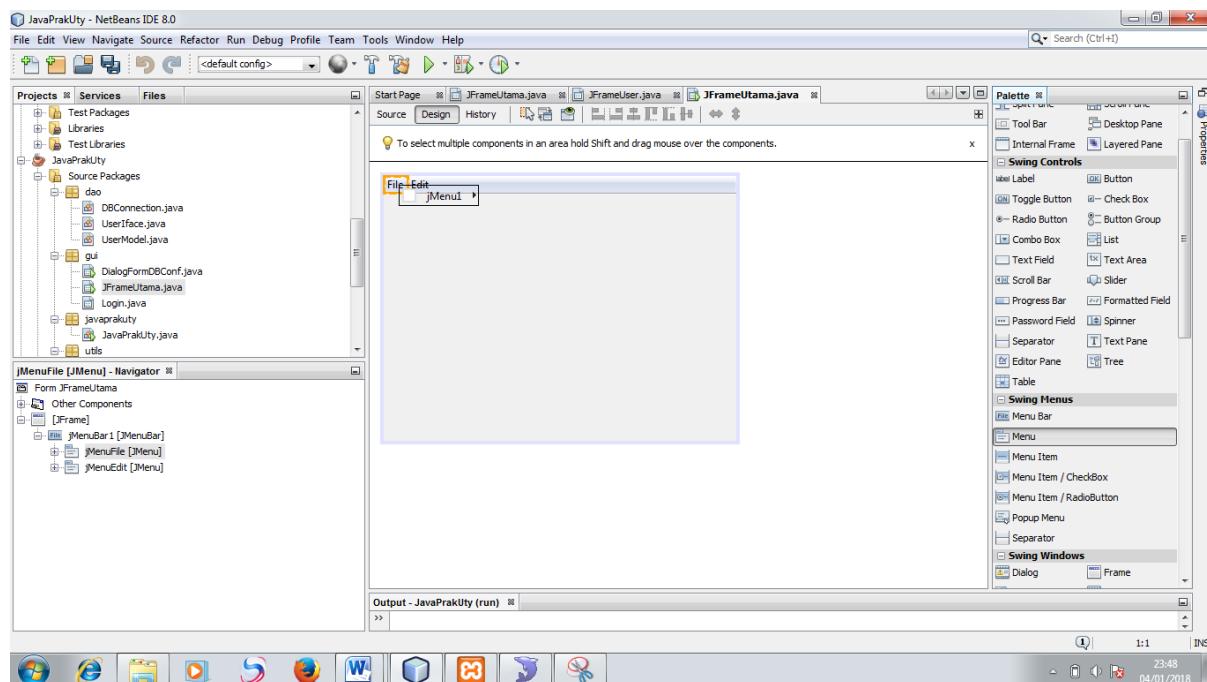
#### 45.Hasilnya



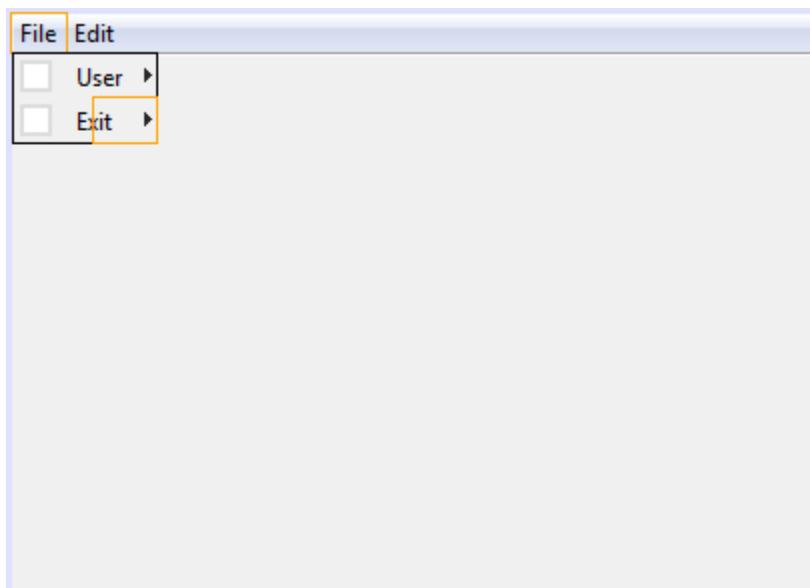
46.inputkanMenuBar



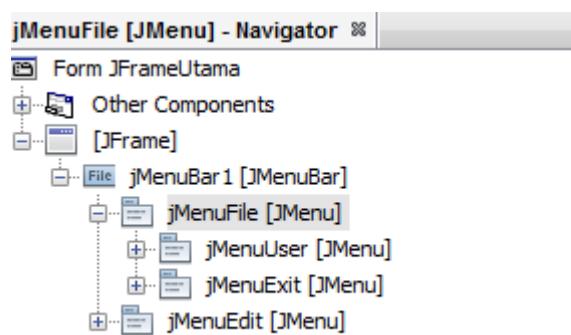
47.inputkan 2 jmenu



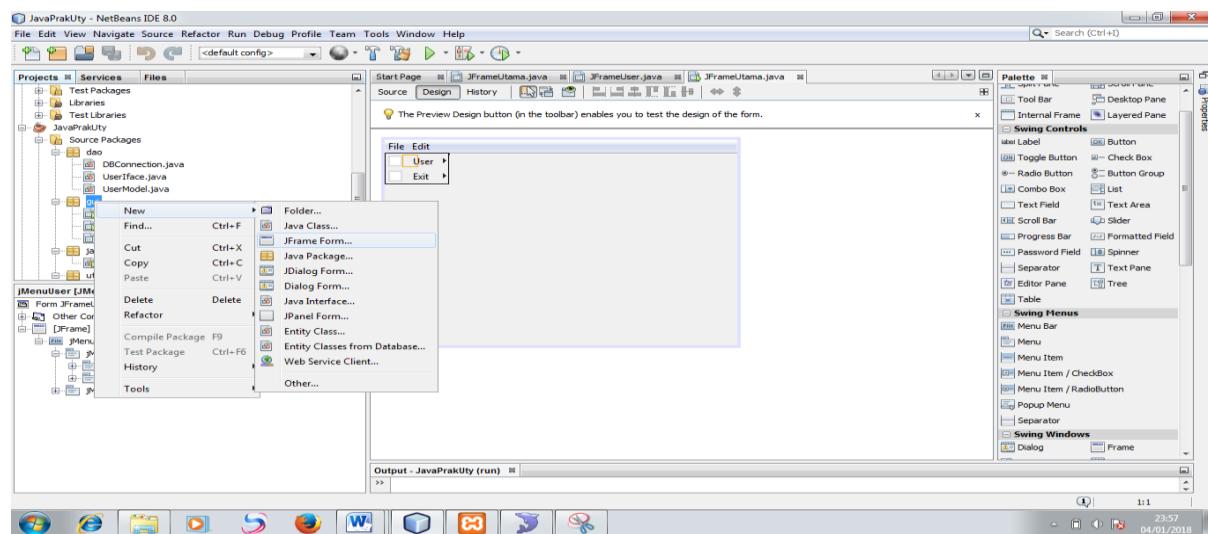
48.



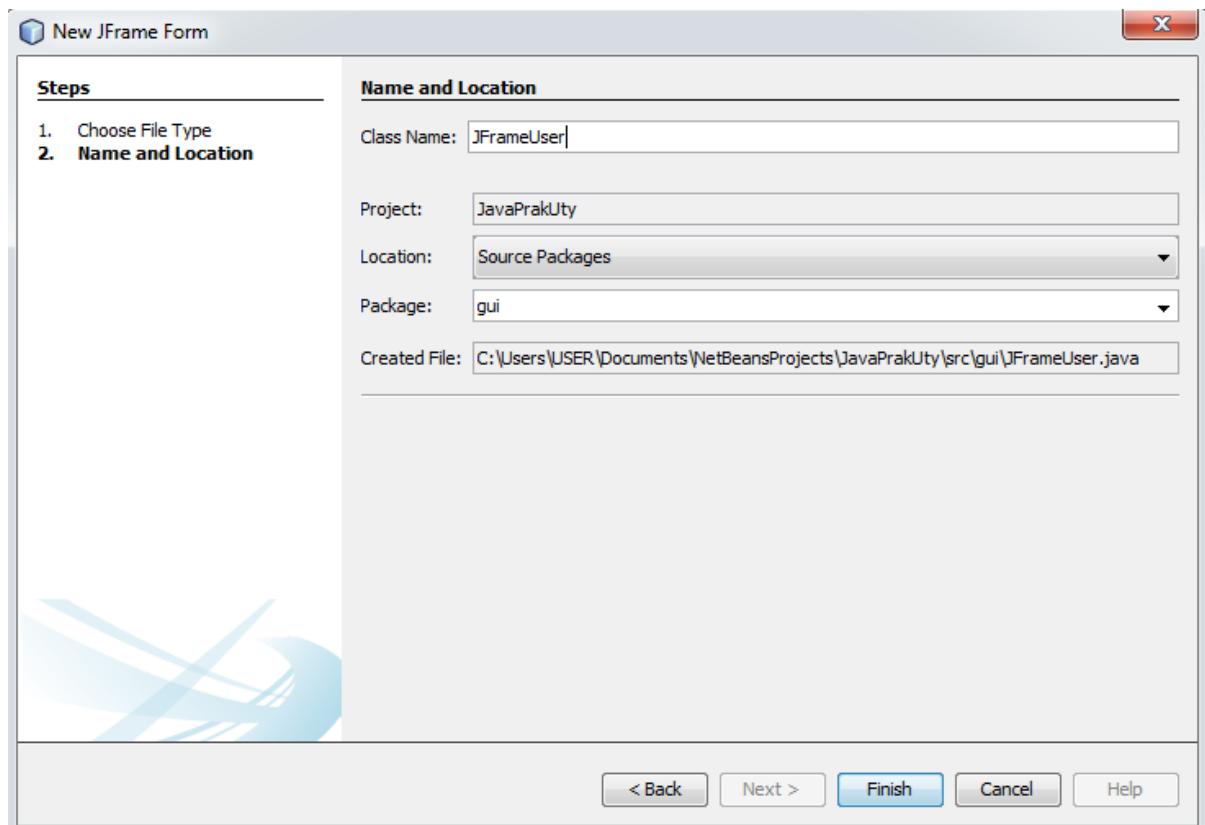
49.



50. Buat JFrame baru lagi di dalam package gui



51.klick Finish

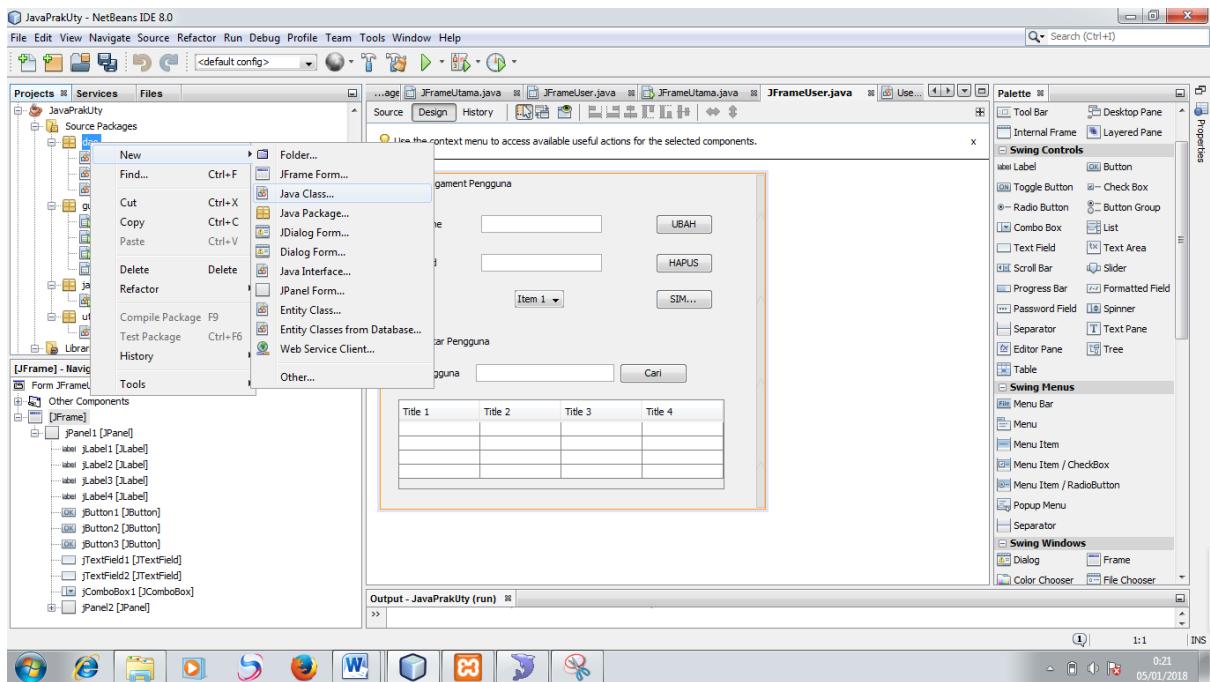


52.

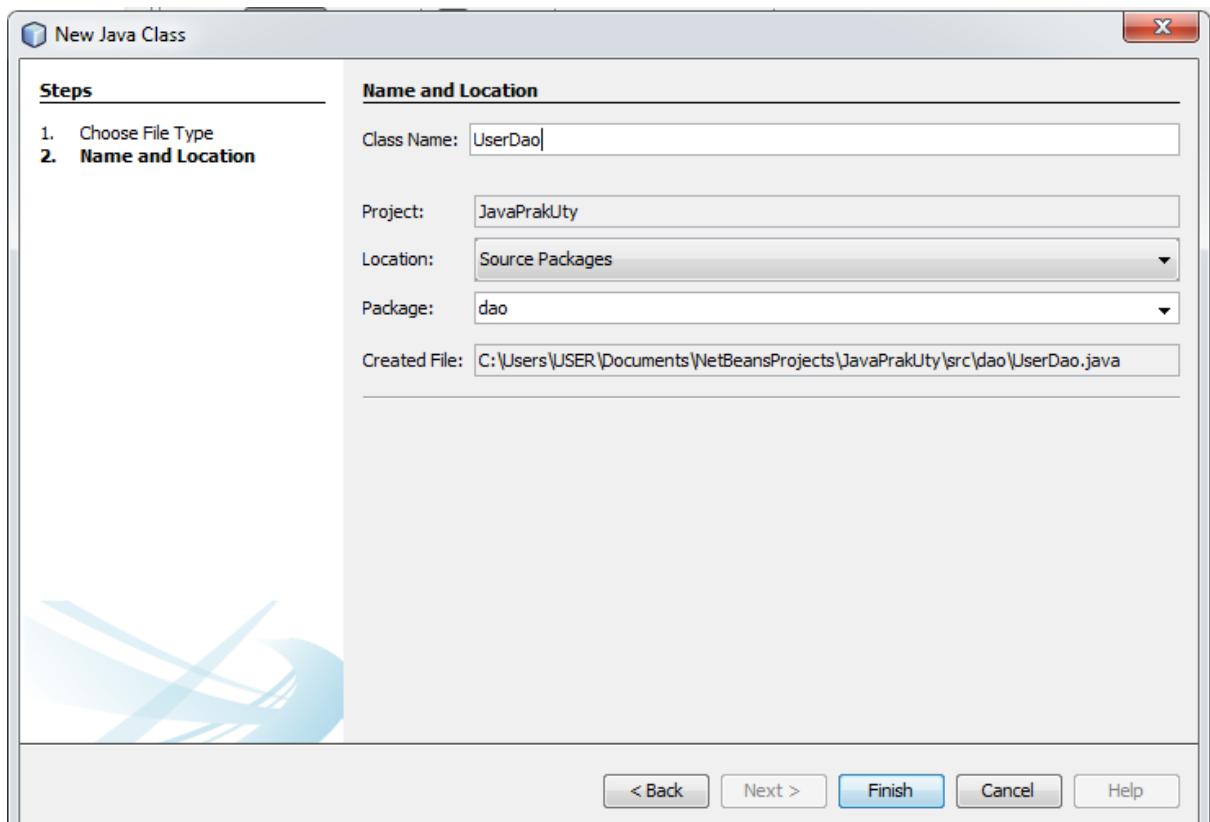
The screenshot shows a Java Swing application window titled 'Managament Pengguna'. It has two main sections:

- User Management:** Contains fields for 'User Name' (with a  field and a **UBAH** button), 'Password' (with a  field and a **HAPUS** button), and 'Role' (with a dropdown menu **Item 1** and a **SIM...** button).
- User List:** Contains a search bar 'Cari Pengguna' with a  field and a **Cari** button, followed by a table with four columns labeled 'Title 1', 'Title 2', 'Title 3', and 'Title 4'. The table has 6 rows of data.

53.class baru di dalam package Dao



54.Klick Finish

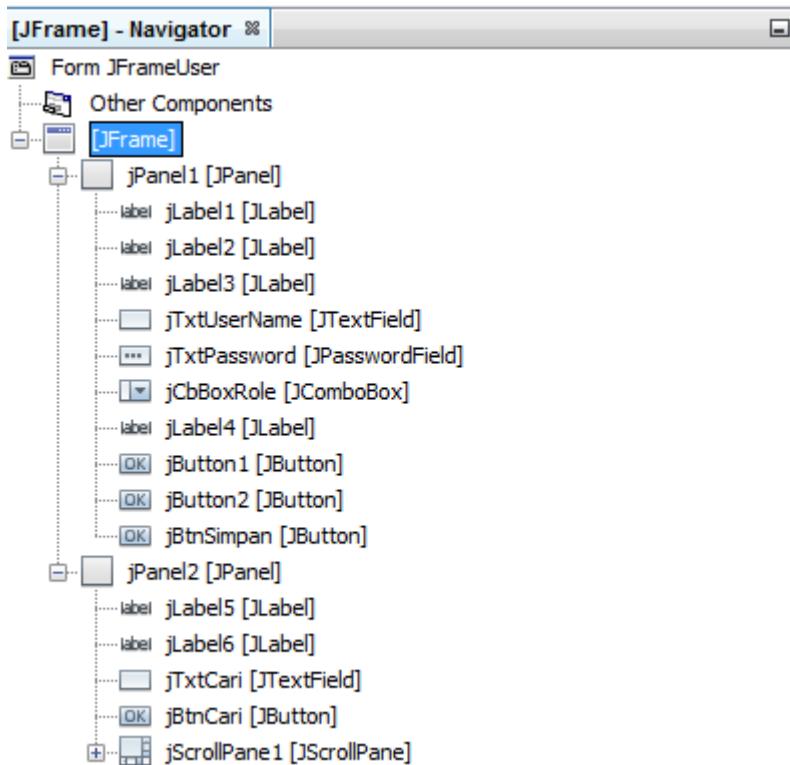


55.source Code Userinterface

The screenshot shows a Java code editor with the following code:

```
1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6
7  package dao;
8
9
10 import java.util.List;
11
12 /**
13  * @author USER
14  */
15
16 public interface UserIface {
17     public boolean checkLogin(UserModel user);
18     public void select(UserModel user);
19     public String insert(UserModel user);
20     public void update(UserModel user);
21     public void delete(UserModel user);
22     public List<UserModel> getAll();
23     public List<UserModel> getCari(String nama);
24 }
25
```

56.merubah variabel name dan text jframeUser



57.Source Code JframeUser

```

1 package gui;
2 import dao.UserAbstractTableModel;
3 import models.UserModel;
4 import gui.JFrameUser;
5 import dao.UserIface;
6 import dao.Userdao;
7 import java.util.List;
8 import javax.swing.JOptionPane;
9 import javax.swing.ComboBoxModel;
10 import javax.swing.DefaultComboBoxModel;
11
12 /**
13 *
14 * @author Danu
15 */
16 public class JFrameUser extends javax.swing.JFrame {
17     private UserIface userIface = null;
18     List<UserModel> listUser;
19     public JFrameUser() {
20         initComponents();
21         userIface = new Userdao();
22         jCboBoxRole.setModel(getComboBoxModel());
23         jCboBoxRole.setSelectedIndex(1);
24         isiTable();
25     }
26     private ComboBoxModel getComboBoxModel() {
27         String[] items = {"Administrator", "Operator"};
28         return new DefaultComboBoxModel(items);
29     }
30 }
31
32 /**
33 * This method is called from within the constructor to initialize the form.
34 * WARNING: Do NOT modify this code. The content of this method is always
35 * regenerated by the Form Editor.
36 */
37 @SuppressWarnings("unchecked")
38 Generated Code
39
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```

```

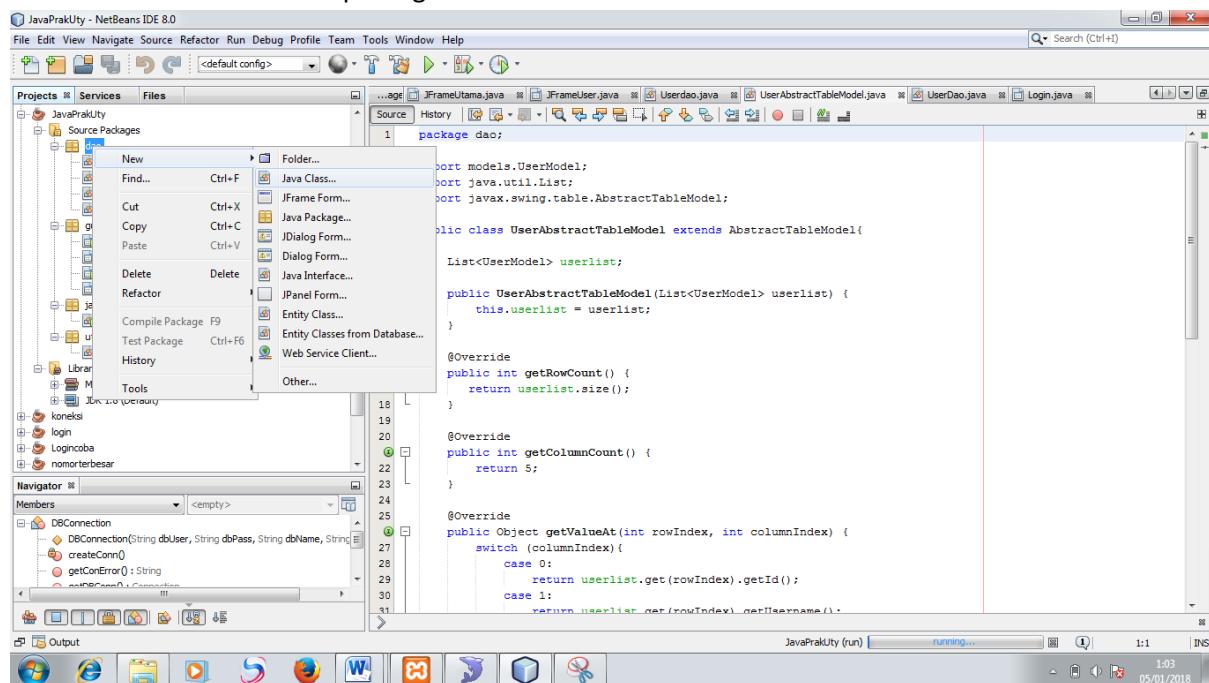
234 }
235     else{
236         JOptionPane.showMessageDialog(null,"ERROR .. !!!");
237     }
238     isiTable();
239 }

240
241     public final void isiTable() {
242         listUser = userIface.getAll();
243         UserAbstractTableModel userabstract = new UserAbstractTableModel(listUser);
244         this.jTableDataList.setModel(userabstract);
245     }

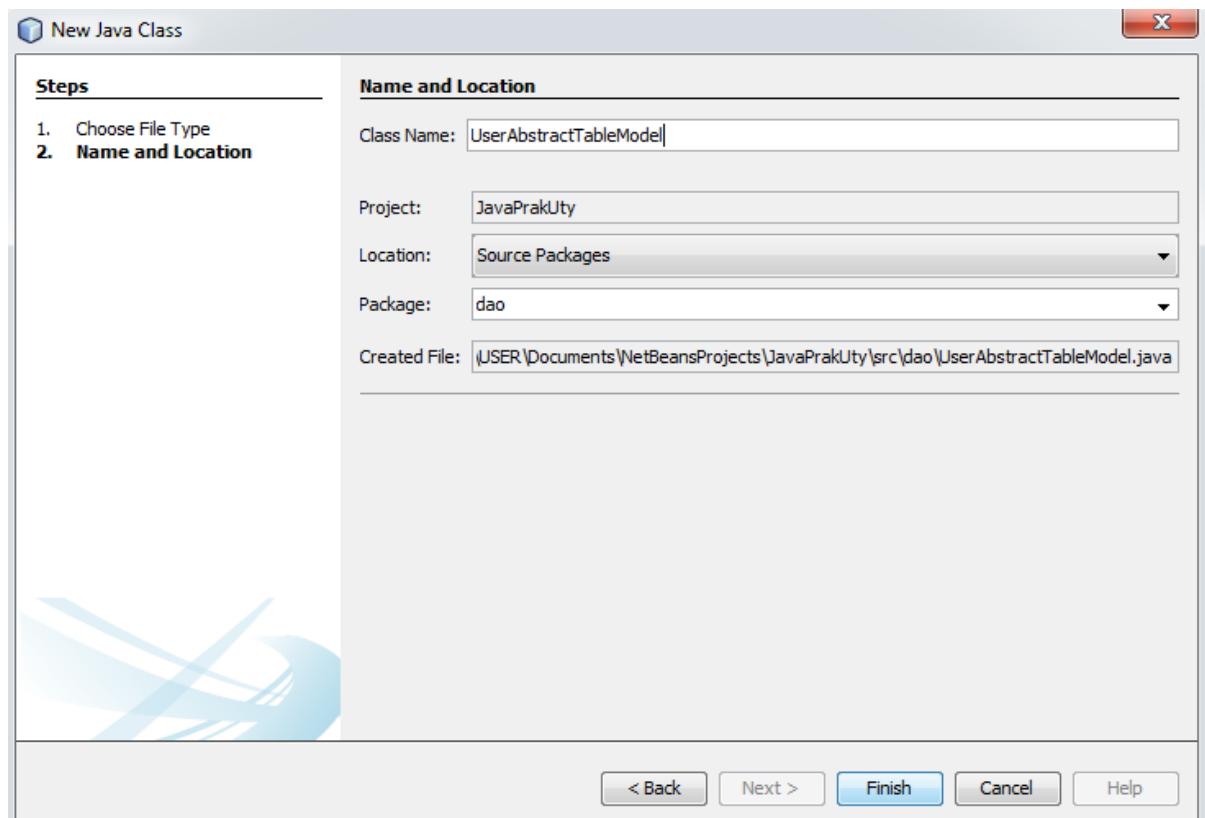
246
247
248 // Variables declaration - do not modify
249 private javax.swing.JButton jBtnCari;
250 private javax.swing.JButton jBtnSimpan;
251 private javax.swing.JButton jButton1;
252 private javax.swing.JButton jButton2;
253 private javax.swing.JComboBox<String> jCbBoxRole;
254 private javax.swing.JLabel jLabel1;
255 private javax.swing.JLabel jLabel2;
256 private javax.swing.JLabel jLabel3;
257 private javax.swing.JLabel jLabel4;
258 private javax.swing.JLabel jLabel5;
259 private javax.swing.JLabel jLabel6;
260 private javax.swing.JPanel jPanel1;
261 private javax.swing.JPanel jPanel2;
262 private javax.swing.JScrollPane jScrollPane1;
263
264
265
266
267
268
269 }

```

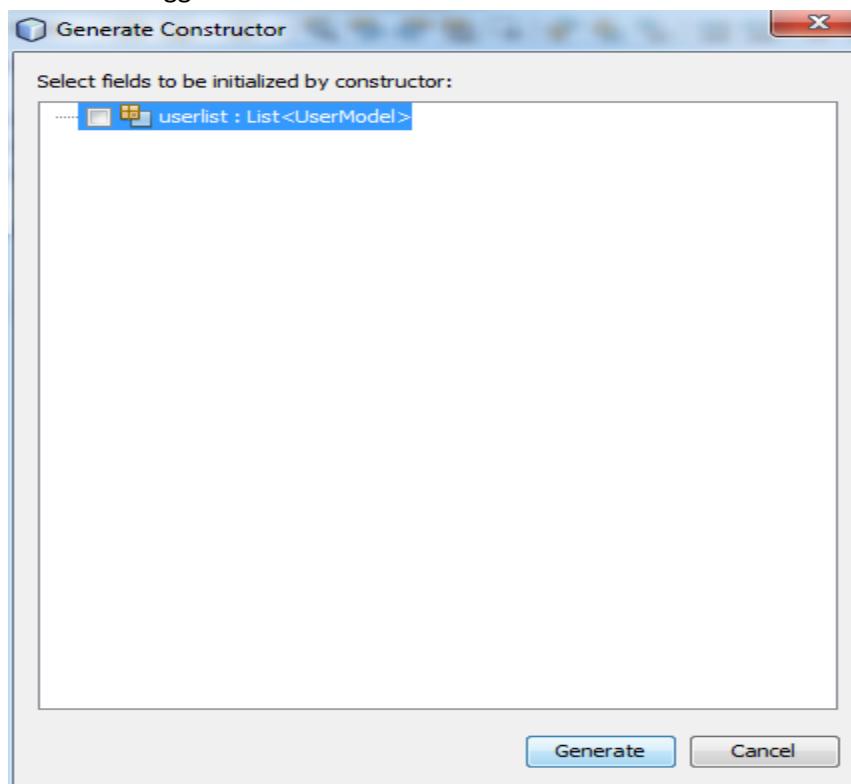
## 58.Buat class baru di dalam package Dao



59.klick Finish



60.Disni menggunakan alt+insert



61.

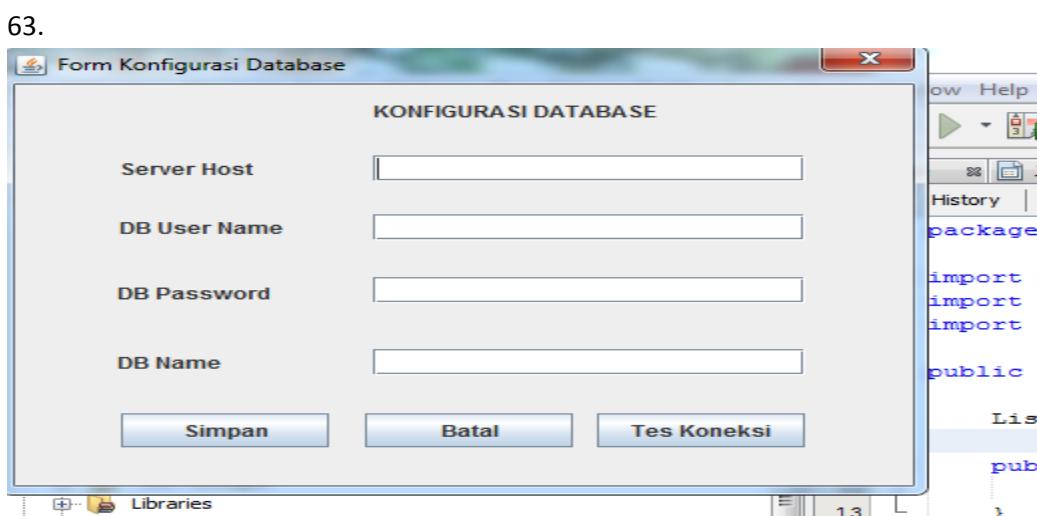
```
1  package dao;
2
3  import models.UserModel;
4  import java.util.List;
5  import javax.swing.table.AbstractTableModel;
6
7  public class UserAbstractTableModel extends AbstractTableModel{
8
9      List<UserModel> userlist;
10
11     public UserAbstractTableModel(List<UserModel> userlist) {
12         this.userlist = userlist;
13     }
14
15     @Override
16     public int getRowCount() {
17         return userlist.size();
18     }
19
20     @Override
21     public int getColumnCount() {
22         return 5;
23     }
24
25
26     @Override
27     public Object getValueAt(int rowIndex, int columnIndex) {
28         switch (columnIndex){
29             case 0:
30                 return userlist.get(rowIndex).getId();
31
32             case 1:
33                 return userlist.get(rowIndex).getUsername();
34             case 2:
35                 return userlist.get(rowIndex).getUserpass();
36             case 3:
37                 return userlist.get(rowIndex).getUserrole();
38             case 4:
39                 return userlist.get(rowIndex).getUserstatus();
40             default:
41                 return null;
42         }
43     }
44     @Override
45     public String getColumnName(int column){
46         switch (column){
47             case 0:
48                 return "id";
49             case 1:
50                 return "username";
51             case 2:
52                 return "userpass";
53             case 3:
```

```
53     return "role";
54
55     case 4:
56         return "status";
57
58     default:
59         return null;
60     }
61 }
```

62.Koneksi

```
3 import models.UserModel;
4 import java.util.List;
5 import javax.swing.table.AbstractTableModel;
6
7 public class UserAbstractTableModel extends AbstractTableModel{
8
9     List<UserModel> userlist;
10
11    public void setListData(List<UserModel> userlist) {
12        this.userlist = userlist;
13    }
14
15    @Override
16    public int getRowCount() {
17        return userlist.size();
18    }
19
20    @Override
```

A modal dialog box titled "Select an Option" is displayed. It contains a green question mark icon and the message "File DBCConf tidak ada". There are three buttons at the bottom: "Yes", "No", and "Cancel". The "Yes" button is highlighted with a blue border.

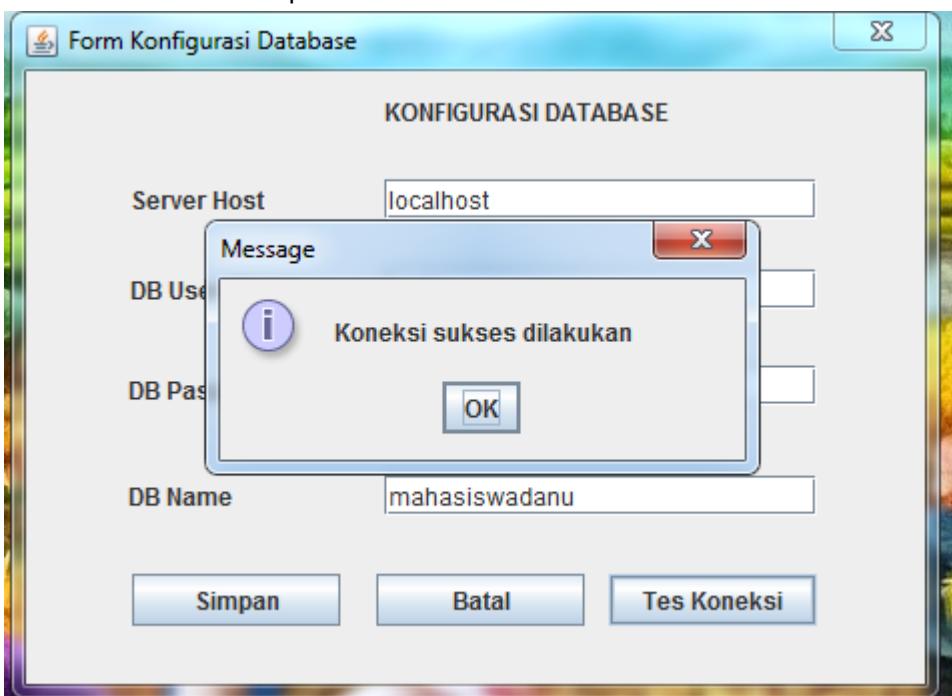


64.

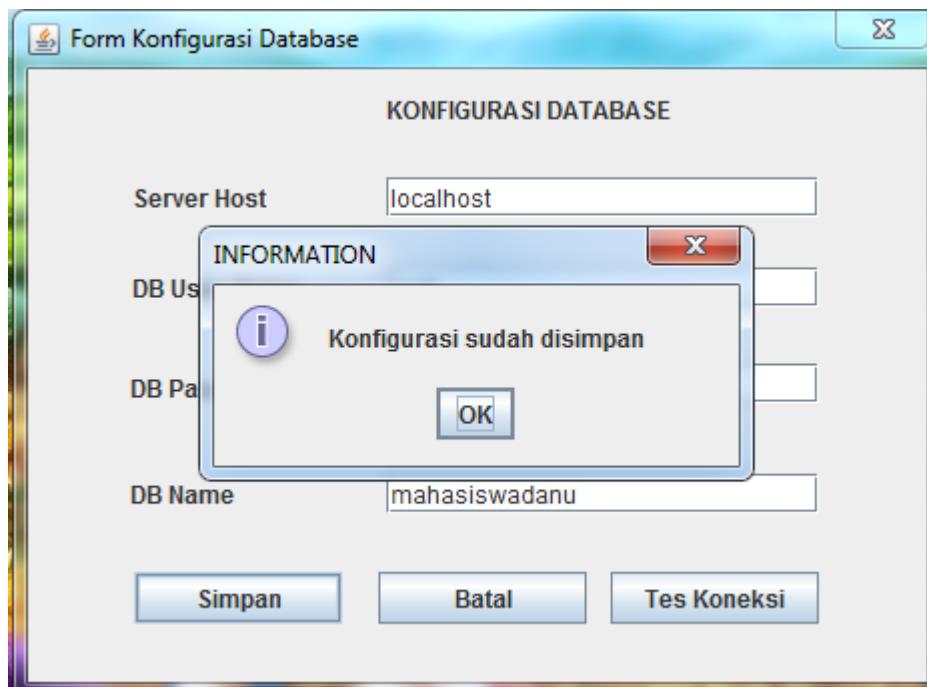
The screenshot shows the MySQL Workbench interface. On the left, the 'Schemas' tree view is expanded to show 'root@localhost'. A blue arrow points to the 'Tables' node under 'mahasiswa'. The 'javaprakii' table is selected, showing its columns ('Columns') and indexes ('Indexes'). On the right, the 'Query' tab is active, displaying the number '1'. Below it, the 'Table Data' tab is selected, showing a single row in the 'javaprakii' table:

id	username	userpass	role	status
11111	Danu	12345	1	0
(NULL)	(NULL)	(NULL)	1	0

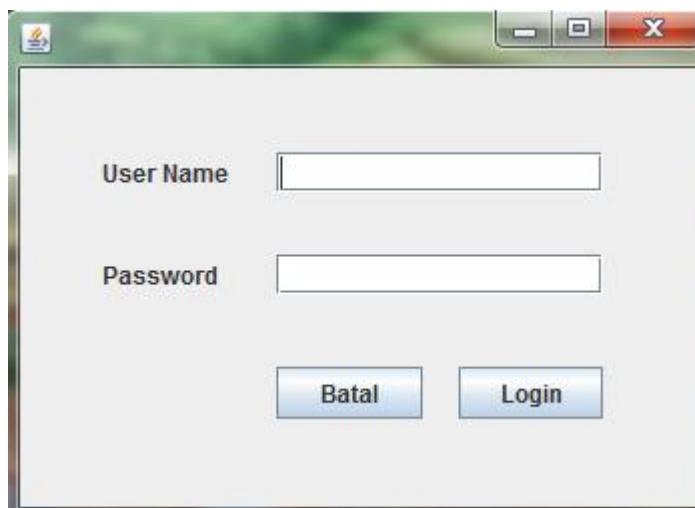
65.klick ok dan klick simpan



66.



57.



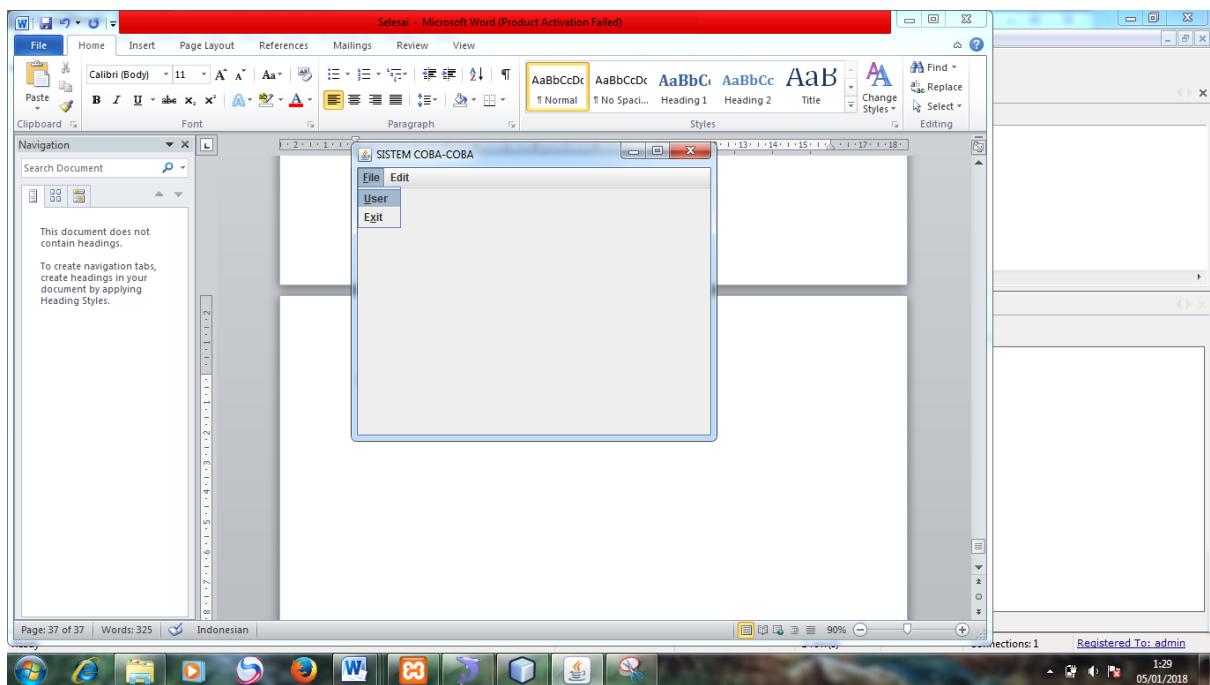
58.

The screenshot shows the MySQL Workbench interface. On the left is the "Schema Designer" pane, which displays the database schema with tables like coba, danu, databasesiswa, information\_schema, koneksi, mahasiswa, and mahasiswa. The "Tables" section under mahasiswa is expanded, showing sub-tables javaprakii, Columns, and Indexes. On the right is the "Table Data" pane, which shows the "javaprakii" table with the following data:

ID	username	userpass	role	status
11111	Danu	12345	1	0
(NULL)	(NULL)	(NULL)	1	0

Two blue arrows point upwards from the bottom of the table rows towards the "userpass" column header.

## 59.klck User

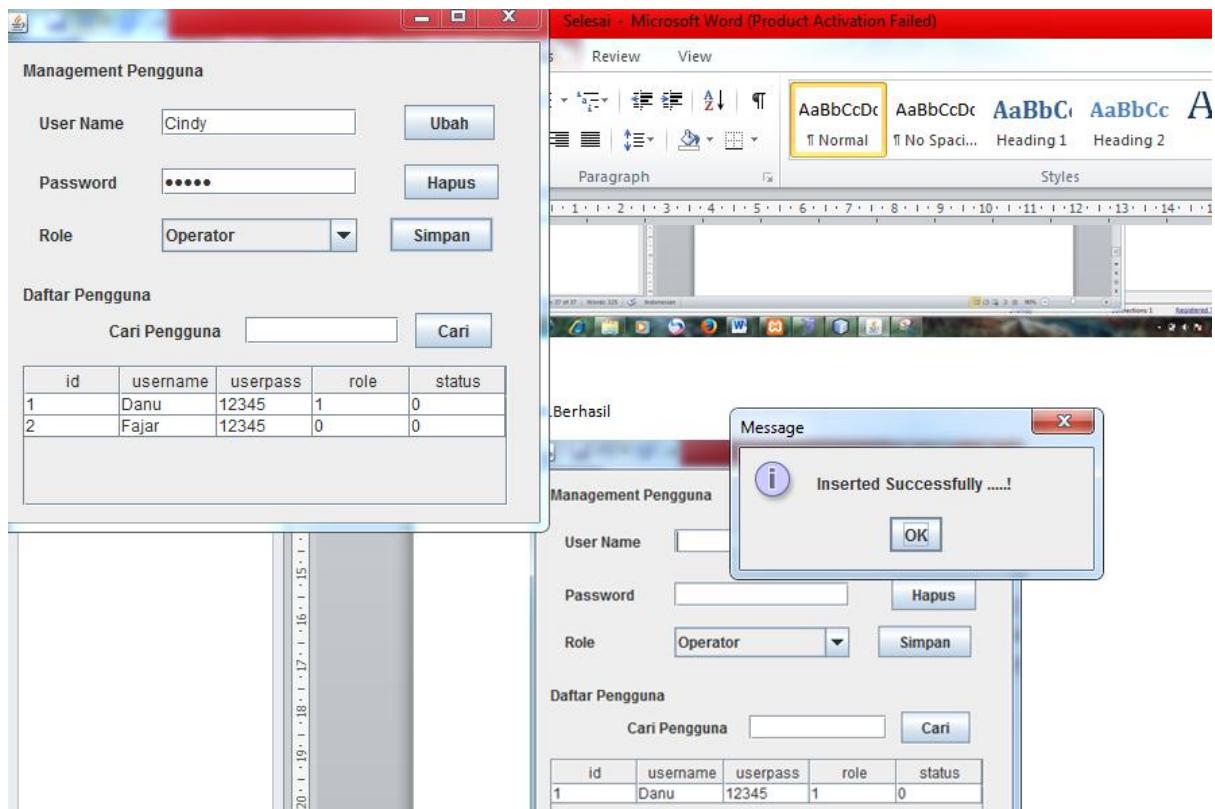


## 60.Berhasil

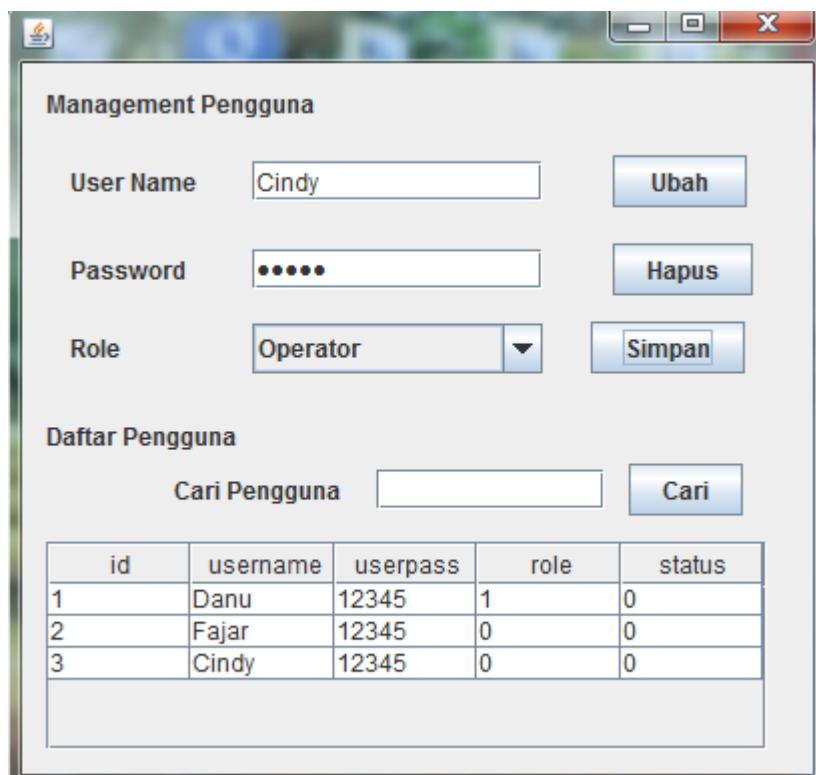
The application window title is "Management Pengguna". It contains three input fields: "User Name" with an empty text box, "Password" with an empty text box, and "Role" with a dropdown menu set to "Operator". Next to each field is a blue "Ubah" (Change), "Hapus" (Delete), or "Simpan" (Save) button. Below these fields is a section titled "Daftar Pengguna" with a search bar labeled "Cari Pengguna" and a "Cari" (Search) button. A table displays user data:

id	username	userpass	role	status
1	Danu	12345	1	0

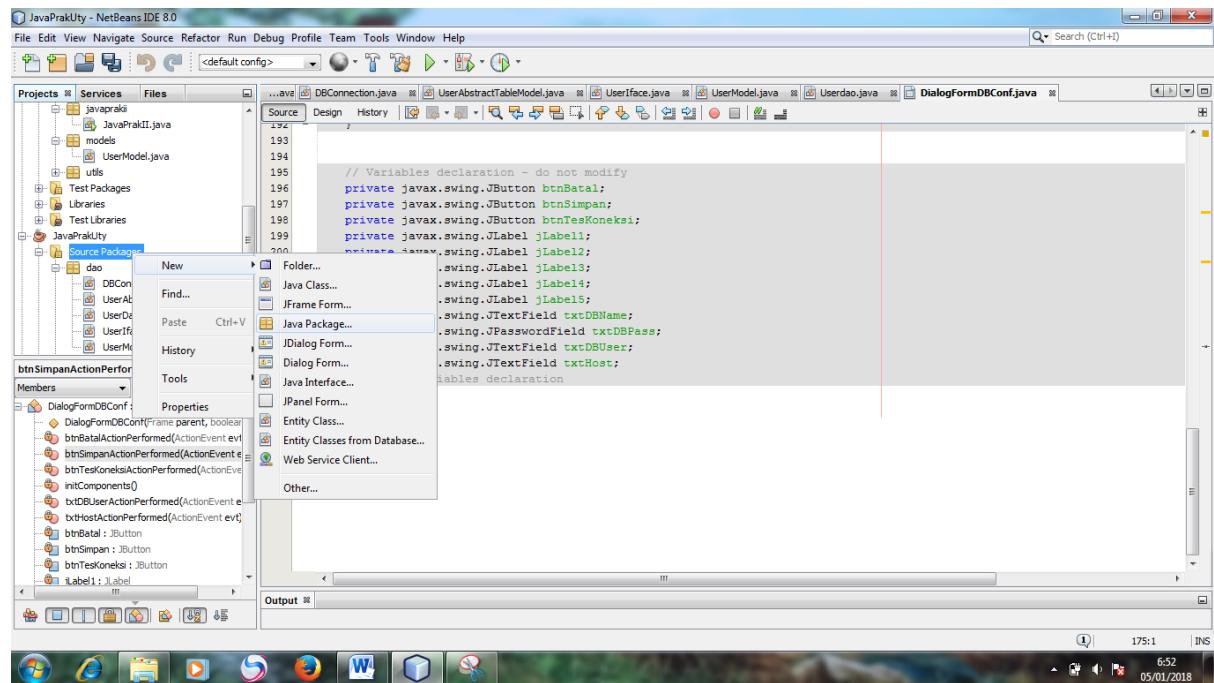
61.



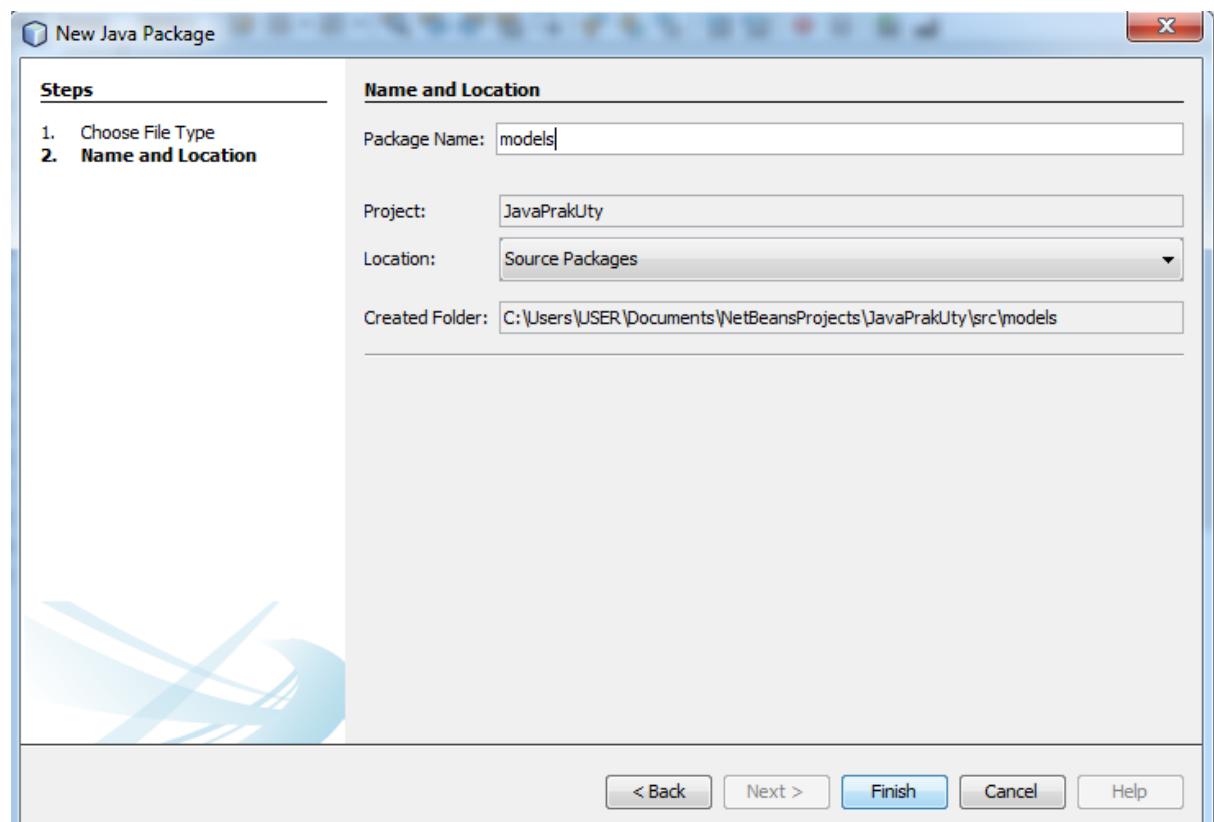
62.



### 63.Buat package Baru Dan Berikan nama Models



### 64.Klick Finish



## 65. Memindahkan class UserModel ke package models

