

SISTEM INFORMASI RENTAL MOBIL

Diajukan Untuk Memenuhi Salah Satu Tugas Mata Kuliah Pemrograman

Lanjutan



Dosen pengajar : Rangga Gelar Guntara S.Kom., M.Kom.

Kelas : PROLAN-5

Disusun Oleh :

Noviyan Prayoga (10115092)

Bagas Harfianto (10115144)

Yudi Supriyadi (10115137)

Maulvi Inayat Ali (10115510)

Tioreza Febrian (10115219)

FAKULTAS TEKNIK DAN ILMU KOMPUTER

UNIVERSITAS KOMPUTER INDONESIA

BANDUNG

2017

Contents

BAB I PENDAHULUAN.....	2
1.1 Latar Belakang	2
1.2 Rumusan Masalah.....	2
1.3 Tujuan.....	3
1.4 Batasan Masalah.....	3
BAB II PEMBAHASAN	4
2.1 Teori	4
2.1.1 MYSQL	4
2.2 Tampilan Program.....	6
2.2.1 Menu Utama	6
2.2.2 Tambah Mobil	6
2.2.3 Listing Mobil	7
2.2.4 Tambah Pelanggan	7
2.2.5 Listing Pelanggan	8
2.2.6 Tambah Sewa	9
2.2.7 Listing Sewa Aktif.....	9
2.2.8 Riwayat Sewa Mobil	10
BAB III FITUR DAN MANUAL BOOK	11
3.1 Fitur	11
3.1.1 Mobil	11
3.1.2 Pelanggan (Penyewa)	11
3.1.3 Penyewaan	11
3.2 Penjelasan Sewa	11
3.3 Penjelasan denda.....	11
3.4 Cara Penggunaan (Manual Book)	12
3.4.1 Cara Menjalankan Program.....	12
3.4.2 Tata Cara Penggunaan Program	13
BAB IV STRUKTUR FILE SOURCE CODE	16

BAB V SOURCE CODE	17
--------------------------------	-----------

BAB VI KESIMPULAN	291
--------------------------------	------------

BAB I PENDAHULUAN

1.1 Latar Belakang

Kemajuan teknologi saat ini telah semakin pesat perkembangannya. Sebagai salah satu produk teknologi adalah komputer yang sangat bermanfaat bagi masyarakat. Komputer juga membuat proses kerja menjadi lebih efisien, efektif dan memberikan hasil kerja lebih baik dan lebih cepat.

Rental mobil salah satu fungsinya adalah memberikan pelayanan jasa penyewaan, namun dalam hal ini pelayanan yang diberikan masih memiliki kekurangan , misalnya pemberian pelayanan pada saat pelanggan datang untuk menyewa mobil, dimana data mobil yang sudah diarsipkan sebelumnya hilang dan mengalami kerusakan pada saat data tersebut dibutuhkan, sehingga memperlambat waktu pelanggan untuk menyewa mobil tersebut.

Pelanggan sebagai salah satu komponen penting yang menggunakan pelayanan jasa dari rental mobil, dimana pelanggan selalu berharap mendapatkan sebuah pelayanan yang terbaik.Oleh karena itu dalam mendukung peningkatan efisiensi kerja, waktu dan sumber daya manusia maka perlu dibangun suatu sistem informasi manajemen agar nantinya diperoleh kemudahan dan kelancaran dalam memberikan pelayanan jasa secara maksimal.

Cara mempermudah pengerjaan didalam memasukan data serta member hasil yang akurat dalam pengolahan suatu data maupun penyajian data maka diperlukan suatu sistem informasi manajemen. Dengan sistem informasi manajemen tersebut, diharapkan dapat mempercepat pelayanan kepada pelanggan serta pengarsipan yang lebih baik dan aman sehingga mempermudah apabila diperlukan sewaktu-waktu.

1.2 Rumusan Masalah

Rumusan masalah ini diperlukan guna memperoleh pembahasan yang mengarah pada pemecahan masalah yang diinginkan. Berdasarkan pembatasan masalah yang telah dikemukakan maka dapat dirumuskan permasalahan sebagai berikut :

1. Bagaimana membuat aplikasi yang dapat membantu proses transaksi penyewaan dan pengembalian mobil ?
2. Bagaimana membuat bukti penyewaan dan menyimpan data-data dengan baik ?
3. Bagaimana memudahkan dalam pembuatan laporan penyewaan dan pengembalian mobil ?

1.3 Tujuan

Tujuan dari permasalahannya adalah sebagai berikut :

1. Memberikan kemudahan dalam proses transaksi penyewaan dan pengembalian mobil.
2. Memberikan informasi bukti penyewaan dan membantu dalam penyimpanan data.
3. Membantu dalam pembuatan laporan

1.4 Batasan Masalah

Adapun batasan masalah dari aplikasi penyewaan mobil terdiri dari:

1. Penyewa hanya boleh melakukan 1 kali sewa
2. Penyewa hanya boleh meminjam 1 mobil
3. Perhitungan sewa berdasarkan hari, bukan jam

BAB II PEMBAHASAN

2.1 Teori

2.1.1 MYSQL

Definisi MySQL

MySQL adalah perangkat lunak yang tergolong sebagai *DataBase Managament System* (DBMS). Perangkat lunak ini bermanfaat untuk mengelola data dengan cara yang sangat fleksibel dan cepat. Berikut adalah sejumlah aktivitas yang terkait dengan data yang didukung oleh MySQL (Abdul Kadir, 2010: 10).

1. Menyimpan data ke dalam tabel;
2. Menghapus data dalam tabel;
3. Mengubah data dalam tabel;
4. Mengambil data yang tersimpan dalam tabel;
5. Memungkinkan untuk memilih data tertentu yang diambil;
6. Memungkinkan untuk melakukan pengaturan hak akses terhadap data.

Perintah-perintah MySQL

Berikut ini adalah beberapa perintah dasar dalam pengelolaan database menggunakan MySQL (Abdul Kadir, 2009).

1. Menciptakan Database

Berikut ini menunjukkan perintah yang digunakan untuk menciptakan sebuah database:

```
CREATE DATABASE nama_database;
```

2. Menciptakan Table

Berikut ini perintah yang digunakan untuk menciptakan tabel, yaitu CREATE TABLE. Bentuk dasar perintah ini seperti berikut:

```
CREATE TABLE nama_table(  
    nama_field tipe_data[(ukuran)][kekangan_field][nilai_bawaan];
```

3. Memasukkan Data

Berikut ini menunjukkan perintah yang digunakan untuk mengisi data ke dalam sebuah tabel dalam database:

```
INSERT INTO nama_table (field_1,...,field_2) values  
(nila_1,...,nilai_2)
```

4. Melihat Isi Tabel

Berikut ini menunjukkan perintah yang digunakan untuk melihat isi tabel:

```
SELECT * FROM nama-tabel;
```

5. Mengubah Isi Record

Berikut ini menunjukkan perintah yang digunakan untuk mengubah data dalam tabel:

```
UPDATE nama_table  
SET kolom_1='nilai_baru_1'  
...  
kolom_n='nilai_baru_n'  
[WHERE kondisi];
```

6. Menghapus Tabel

Berikut ini menunjukkan perintah yang digunakan untuk menghapus tabel dalam database:

```
DROP TABLE nama_table;
```

7. Menghapus Database

Berikut ini menunjukkan perintah yang digunakan untuk menghapus sebuah database:

```
DROP DATABASE nama_database;
```

2.2 Tampilan Program

2.2.1 Menu Utama

Terdiri dari:

1. Mobil : Tambah, Listing
2. Pelanggan : Tambah, Listing
3. Penyewaan : Tambah, Listing Riwayat Sewa, Listing Sewa Aktif

2.2.2 Tambah Mobil

Form Tambah Mobil berisi inputan untuk menambahkan daftar mobil untuk disewa, form Tambah Mobil terdiri dari: No. Polisi, Merk, Warna, Tahun, Harga Sewa 12 jam, Harga 24 jam, Denda Per Hari, dan Status.

Mobil Pelanggan Penyewaan

Tambah Mobil

No. Polisi (9 karakter maksimal)

Merk

Warna

Tahun

Harga Sewa 12 Jam

Harga Sewa 24 Jam

Denda Per Hari

Status

just a gap holder

2.2.3 Listing Mobil

Form Listing Mobil berisi daftar list mobil yang tersedia untuk disewakan, informasi detail mobil, pencarian mobil yang diinginkan, tombol untuk ubah data mobil dan tombol untuk menghapus data mobil.

Mobil Pelanggan Penyewaan

Opsi

Harga Sewa 12 Jam: >= 0

Harga Sewa 24 Jam: >= 0

Status: Tersedia

Reset Terapkan

Pencarian :

No Polisi	Merk	Harga Sewa 12 Jam	Harga Sewa 24 Jam
ABC	Kijang III	Tidak Tersedia	200000
D 888 BC	Honda Jazz	Tidak Tersedia	250000
D1405GC	Toyota Avanza	Tidak Tersedia	250000
D6748GH	Nissan X-Trail	Tidak Tersedia	650000
D7764IM	Toyota Yaris	Tidak Tersedia	400000

<< < 1 > >> Halaman 1 dari 2

Informasi secara Detail

No. Polisi	<input type="text" value="Pilih baris data"/>	Harga Sewa 12 Jam	<input type="text" value="Pilih baris data"/>
Merk	<input type="text" value="Pilih baris data"/>	Harga Sewa 24 Jam	<input type="text" value="Pilih baris data"/>
Warna	<input type="text" value="Pilih baris data"/>	Denda per Jam	<input type="text" value="Pilih baris data"/>
Tahun	<input type="text" value="Pilih baris data"/>	Status	<input type="text" value="Pilih baris data"/>

Ubah Hapus

2.2.4 Tambah Pelanggan

Form Tambah Pelanggan berisi inputan data pelanggan yang ingin menyewa mobil, form tambah pelanggan terdiri dari :No.KTP, Nama, Jenis Kelamin, Tanggal Lahir, Pekerjaan, Alamat, Kota, Telepon, No.HP, dan Email.

Mobil Pelanggan Penyewaan

Form Tambah Pelanggan

No. KTP:

Nama:

Jenis Kelamin: ☒ L ☐ P

Tanggal Lahir: HH MM TTTT

Pekerjaan:

Alamat:

Kota: ▼

Telepon:

No. HP:

Email:

2.2.5 Listing Pelanggan

Form Listing Pelanggan berisi data daftar pelanggan, informasi detail pelanggan, pencarian pelanggan, tombol untuk ubah data pelanggan dan tombol untuk menghapus data pelanggan.

Mobil Pelanggan Penyewaan

Pencarian:

noKTP	nama	tanggalLahir	pekerjaan
DBF199853095830066	Tatang Supriatna	09-11-1983	PNS
GHK198914875198422	Jasmin Lestari	11-10-1989	Aktris

<< < 1 > >> Halaman 1 dari 1

Informasi secara Detail

No. KTP	<input type="text" value="Pilih baris data"/>	Pekerjaan	<input type="text" value="Pilih baris data"/>
Nama	<input type="text" value="Pilih baris data"/>	Alamat	<input type="text" value="Pilih baris data"/>
Jenis Kelamin	<input type="text" value="Pilih baris data"/>	Kota	<input type="text" value="Pilih baris data"/>
Tanggal Lahir	<input type="text" value="Pilih baris data"/>	Telepon	<input type="text" value="Pilih baris data"/>
No. HP	<input type="text" value="Pilih baris data"/>	Email	<input type="text" value="Pilih baris data"/>

2.2.6 Tambah Sewa

Form Tambah Penyewa berisikan tentang detail mobil yang disewakan melalui pencarian No.Polisi atau Merk mobil, detail pelanggan yang akan menyewa mobil melalui pencarian No.KTP atau nama pelanggan, dan detail lama penyewaan yang dilakukan.

Mobil Pelanggan Penyewaan

Form Penyewaan Mobil

Cari Mobil: No. Polisi atau Merk

Detail Mobil

No. Polisi		Harga Sewa 24 Jam	
Merk		Harga Sewa 12 Jam	
Warna		Denda Per Jam	
Tahun			

Cari Pelanggan: No KTP atau Nama

Detail Informasi

No. KTP		Pekerjaan	
Nama		Alamat	
Jenis Kelamin		Kota	
Tanggal Lahir		Telepon	
No. HP		Email	

Detail Penyewaan

Tanggal Sewa	HH	MM	YYYY
Akhir Sewa	HH	MM	YYYY

SEWAKAN RESET

2.2.7 Listing Sewa Aktif

Form Listing Penyewa berisikan daftar data penyewaan yang aktif, detail data penyewa, dan detail mobil yang disewakan.

Mobil Pelanggan Penyewaan

Tabel Penyewaan Aktif

Pencarian :

idSewa	noPolisi	noKTP	tanggalSewa
12	111	1000155555	12-06-2017

<< < 1 > >> Halaman 1 dari 1

Detail Pelanggan

No. KTP: 1000155555 Pekerjaan: Developer

Nama: Noviyan Prayoga Alamat: Jl Banten No.2

Jenis Kelamin: Laki-laki Kota: Bandung

Tanggal Lahir: 1997-05-03 Telepon:

No. HP: 0891234567 Email: noviyan.prayoga@gmail.com

Detail Mobil

No. Polisi: 111 Harga Sewa 12 Jam: 1000

Merk: avanza Harga Sewa 24 Jam: 5000

2.2.8 Riwayat Sewa Mobil

Form Riwayat Sewa Mobil berisikan daftar data para penyewa yang sudah pernah menyewa mobil, pencarian riwayat penyewa, detail pelanggan yang pernah menyewa, dan detail mobil yang pernah disewa.

Mobil Pelanggan Penyewaan

Tabel Riwayat Penyewaan

Pencarian :

idSewa	noPolisi	noKTP	tanggalSewa
8	ABC	DBF199853095830066	15-07-2017
9	33355666	1000155555	18-07-2017
10	D7764M	DBF199853095830066	15-07-2017
11	XYZ	DBF199853095830066	16-07-2017

<< < 1 > >> Halaman 1 dari 1

Detail Pelanggan

No. KTP: DBF199853095830066 Pekerjaan: PNS

Nama: Tatang Supriatna Alamat: Jl DIPATILUKUR NO. 1534

Jenis Kelamin: Laki-laki Kota: Bandung

Tanggal Lahir: 1983-11-09 Telepon:

No. HP: 0892454432 Email:

Detail Mobil

No. Polisi: ABC Harga Sewa 12 Jam: 100000

Merk: Kiaano III Harga Sewa 24 Jam: 200000

BAB III FITUR DAN MANUAL BOOK

3.1 Fitur

Program ini berisi beberapa fitur :

3.1.1 Mobil

- 1) Lihat Data
 - i) Opsi menampilkan data mobil berdasarkan status ketersediaan serta harga sewa
- 2) Tambah Mobil
- 3) Edit Data Mobil
- 4) Hapus Mobil

3.1.2 Pelanggan (Penyewa)

- 1) Lihat Data
- 2) Tambah Penyewa
- 3) Edit Data Penyewa
- 4) Hapus Penyewa

3.1.3 Penyewaan

- 1) Lihat Data Sewa
 - i) Yang masih aktif
 - ii) Yang sudah selesai
- 2) Tambah Sewa
- 3) Tutup Sewa (Menandakan bahwa penyewaan selesai)
 - i) Hitung dan menampilkan biaya sewa
- 4) Hapus Sewa

3.2 Penjelasan Sewa

Jumlah Biaya Sewa = Harga Sewa 24 jam * Hari Sewa

3.3 Penjelasan denda.

Ketika pelanggan mengembalikan mobil (transaksi sewa selesai).

Contoh : mobil X punya data berupa sewa 1 hari = 100rb dan denda 30rb

Lalu pelanggan telat 3 hari ngembaliin maka :

denda = 1 * 30rb

denda = 2 * 100rb, atau dengan kata lain:

denda seluruh = (1 * 30rb) + (2 * 100rb)

denda seluruh = (1 * denda) + (jmlh_hari_telat * harga sewa 1 hari)

3.4 Cara Penggunaan (Manual Book)

3.4.1 Cara Menjalankan Program

1. Buka Netbeans
2. Klik menu Open Project, arahkan ke folder program ini
Setelah itu, setting agar netbeans terhubung ke database
3. Klik kanan -> Properties
4. Di menu kiri, pilih Libraries
5. Klik tombol Add JAR
6. Arahkan ke folder hasil Ekstrak
7. Pilih File “mysql-connector-java-5.1.42-bin.jar” yang sudah terlampir di folder program
Kemudian, import database agar siap dipakai oleh program
8. Buka phpmyadmin
9. Klik menu Import -> tombol Browse File
10. Arahkan ke file “database.sql” di folder program
11. Klik tombol Send/Kirim
- Terakhir,
12. Klik menu Run -> Run Project

Jika anda kendala mungkin perlu untuk setting beberapa hal secara manual, buka program lalu buka package belajardatabase.mysql lalu buka file MyDBConnection sesuaikan url , username , dan password database anda.

```
public class MyDBConnection {  
    private String driver = "com.mysql.jdbc.Driver";  
    private String url = "jdbc:mysql://localhost/penyewaan_mobil?zeroDateTimeBehavior=convertToNull";  
    private String username = "root";  
    private String password = "";  
    private Connection conn = null;  
  
    public void myDBConnection() {  
        // empty  
    }  
  
    public void init() {  
        try {  
            Class.forName(driver);  
            conn = DriverManager.getConnection(url, username, password);  
        }  
        catch (Exception e) {  
            System.out.println("Error : " + e.getMessage());  
        }  
    }  
}
```

3.4.2 Tata Cara Penggunaan Program

Terdapat 3 Menu pada aplikasi ini , yaitu :

1. Mobil

Di dalam menu mobil ini terdapat 2 sub menu , yaitu list mobil dan tambah mobil.

List mobil digunakan untuk melihat daftar mobil. Cara penggunaanya

- Jalankan program , lalu pada menu diatas klik mobil dan pilih list mobil.jika ingin melihat daftar mobil dan klik submenu tambah jika ingin menambahkan mobil,.

Mobil Pelanggan Penyewaan

Listing
Tambah

Harga Sewa 12 Jam >= 0

Harga Sewa 24 Jam >= 0

Status Tersedia

Reset Terapkan

Pencarian : Tambah Sewa...

No Polisi	Merk	Harga Sewa 12 Jam	Harga Sewa 24 Jam
D1405GC	Toyota Avanza	Tidak Tersedia	250000
D6748GH	Nissan X-Trail	Tidak Tersedia	650000
D7764HM	Toyota Yaris	Tidak Tersedia	400000

<< < 1 > >> Halaman 1 dari 1

Informasi secara Detail

No. Polisi Harga Sewa 12 Jam

Merk Harga Sewa 24 Jam

Warna Denda per Jam

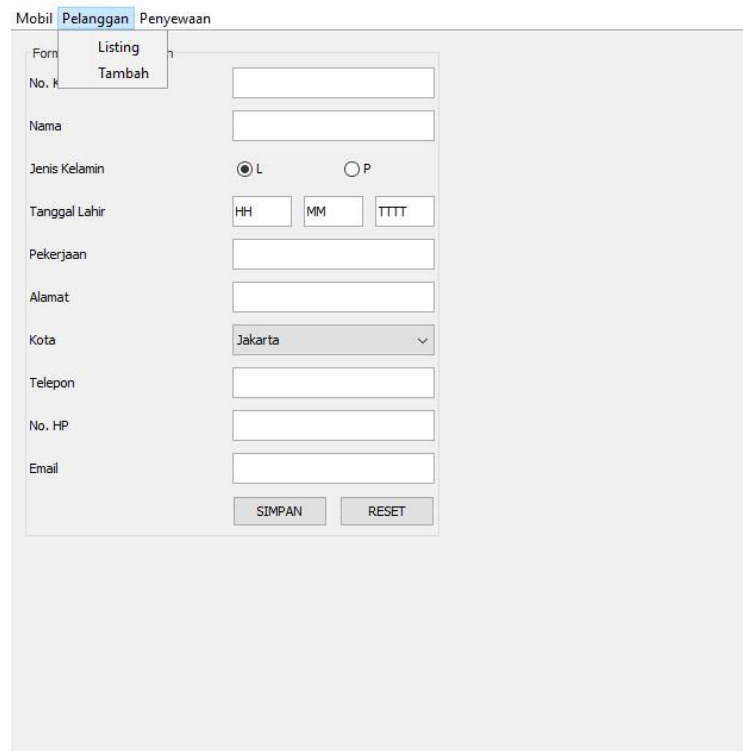
Tahun Status

Ubah Hapus

2. Pelanggan

Didalam menu ini terdapat 2 submenu yaitu list pelanggan dan tambah pelanggan. List pelanggan digunakan untuk melihat daftar pelanggan dan tambah pelanggan digunakan untuk menambahkan pelanggan jika ada pelanggan baru. Cara penggunaannya.

- Jalankan program, lalu klik menu pada bagian atas maka akan muncul 2 submenu yaitu list pengguna dan tambah pengguna.

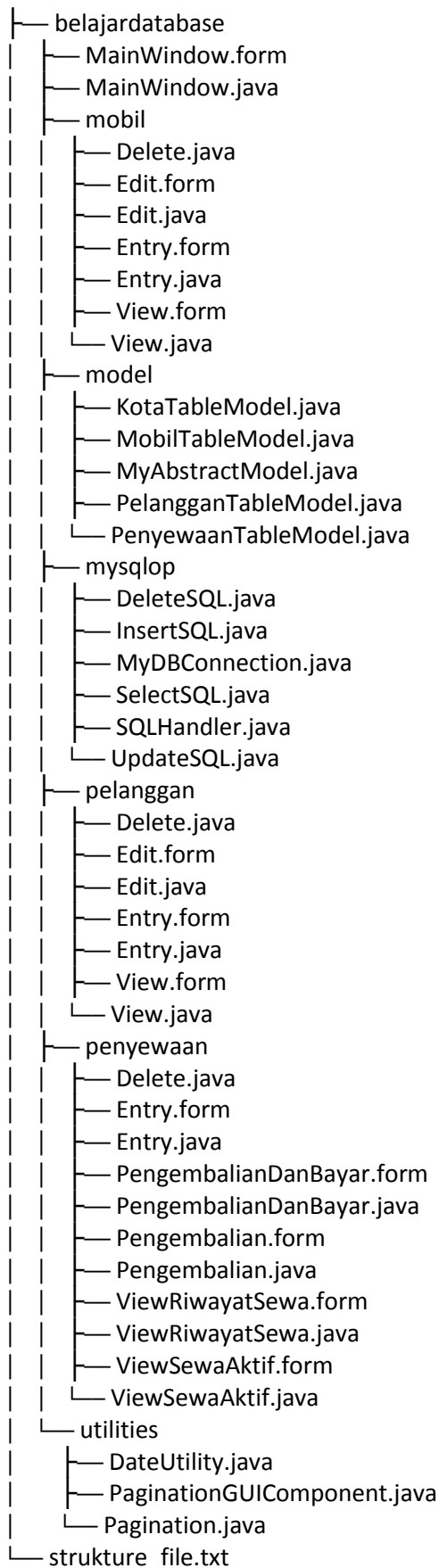


3. Penyewaan

Terakhir yaitu penyewaan , didalam penyewaan terdapat 3 submenu yaitu list penyewaan tambah penyewaan dan history penyewaan. List penyewaan digunakan untuk menampilkan daftar penyewa beserta detail mobil yang disewa, tambah penyewaan digunakan untuk menambahkan data penyewaan jika ada pelanggan yang ingin menyewa, dan history penyewaan digunakan untuk menampilkan history penyewaan pengguna.

Form Penyewaan		Listing Riwayat Sewa Cari Mobil Tambah		<input type="text"/>	
Detail Mobil					
No. Polisi	<input type="text"/>	Harga Sewa 24 Jam	<input type="text"/>		
Merk	<input type="text"/>	Harga Sewa 12 Jam	<input type="text"/>		
Warna	<input type="text"/>	Denda Per Jam	<input type="text"/>		
Tahun	<input type="text"/>				
Cari Pelanggan		<input type="text"/> No KTP atau Nama			
Detail Informasi					
No. KTP	<input type="text"/>	Pekerjaan	<input type="text"/>		
Nama	<input type="text"/>	Alamat	<input type="text"/>		
Jenis Kelamin	<input type="text"/>	Kota	<input type="text"/>		
Tanggal Lahir	<input type="text"/>	Telepon	<input type="text"/>		
No. HP	<input type="text"/>	Email	<input type="text"/>		
Detail Penyewaan					
Tanggal Sewa	<input type="text"/> HH	<input type="text"/> MM	<input type="text"/> YYYY		
Akhir Sewa	<input type="text"/> HH	<input type="text"/> MM	<input type="text"/> YYYY		
		SEWAKAN		RESET	

BAB IV STRUKTUR FILE SOURCE CODE



BAB V SOURCE CODE

```
./model/MobilTableModel.java
```

```
/*
```

```
* 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 belajardatabase.model;
```

```
import java.sql.*;
```

```
import java.util.ArrayList;
```

```
/**
```

```
*
```

```
* @author ASEP
```

```
*/
```

```
public class MobilTableModel extends MyAbstractModel {
```

```
    public static final String    table    = "mobil";
```

```
    public static final int      dataPerPage = 5;
```

```
    private final int colnum = 8;
```

```
    private int rownum;
```

```
    private final String[] colname = {
```

```
        "No Polisi", // ditampilkan pada tabel
```

```
        "Merk", // ditampilkan pada tabel
```

```
        "Harga Sewa 12 Jam", // ditampilkan pada tabel
```

```
        "Harga Sewa 24 Jam", // ditampilkan pada tabel
```

```
        "Warna",
```

```
        "Tahun",
```

```
        "Denda per Jam",
```

```

        "Status"
    };

    private ArrayList<String[]> Result_Sets;

    public MobilTableModel() {
        super("", table); // initiate @var sql properties of this class/instance
    }

    public void save(ResultSet rs) {
        Result_Sets = new ArrayList<String[]>();

        try {
            while (rs.next()) {
                String[] row = {
                    rs.getString("noPolisi"),
                    rs.getString("merk"),
                    "Tidak Tersedia",
                    rs.getString("hargaSewa24Jam"),
                    rs.getString("warna"),
                    rs.getString("tahun").substring(0, 4),
                    rs.getString("dendaPerJam"),
                    rs.getString("status")
                };
                Result_Sets.add(row);
            }
        } catch (SQLException e) {
            System.out.println("Error inside `save` method: "
                + e.getMessage());
        }
    }
}

```

```

@Override

public int getRowCount() {

    return Result_Sets.size();

}

```

```

@Override

public int getColumnCount() {

    return colnum;

}

```

```

@Override

public Object getValueAt(int rowIndex, int columnIndex) {

    String[] row = Result_Sets.get(rowIndex);

    return row[columnIndex];

}

```

```

@Override

public String getColumnName(int index) {

    return colname[index];

}

```

```

public int getNumberOfPage() {

    // [1] backup

    String tmp_select = (String) this.sql.select.get("select");

    int tmp_limit     = (int) this.sql.select.get("limit");

    int tmp_offset    = (int) this.sql.select.get("offset");


    // [2] change

    this.sql.select.select("count(noPolisi) as num_rows");

    this.sql.select.removeLimit();

    ResultSet rs = this.sql.select.execute();
}

```

```

int num_page = -1;

try {
    rs.next();

    int num_rows = rs.getInt("num_rows");

    num_page = (int) Math.ceil(num_rows / (double) this.dataPerPage);
} catch (SQLException e) {
    System.out.println("Error inside `getNumberOfPageByLimit` method: "
        + e.getMessage());
} finally {
    this.sql.mdbc.close(rs);

    // [3] recover
    this.sql.select.select(tmp_select);
    this.sql.select.limit(tmp_limit);
    this.sql.select.offset(tmp_offset);
}

return num_page;
}

/* constant property */
public static final int STATUS_TERSEDIA = 0;
public static final int STATUS_TIDAK_TERSEDIA = 1;
}./model/PenyewaanTableModel.java

/*
 * 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 belajardatabase.model;

import static belajardatabase.model.PenyewaanTableModel.table;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.util.ArrayList;
import java.util.Date;
import java.util.Locale;

/**
 *
 * @author ASEP
 */
public class PenyewaanTableModel extends MyAbstractModel {

    public static final String    table    = "sewa";

    public static final int      dataPerPage = 5;

    private int colnum = 8;
    private int rownum;
    private String[] colname = {
        "idSewa",
        "noPolisi",
        "noKTP",
        "tanggalSewa",
        "batasKembali",
        "tanggalKembali",
        "subTotal",
        "denda"
    }

```

```

};

private ArrayList<String[]> Result_Sets;

public PenyewaanTableModel() {
    super("?", table);
}

public void save(ResultSet rs) {
    Result_Sets = new ArrayList<String[]>();

    try {
        String tanggalSewa = "";
        String tanggalBatasKembali = "";
        String tanggalKembali = "";
        while (rs.next()) {
            tanggalSewa = parseDate(rs.getDate("tanggalSewa"));
            tanggalBatasKembali = parseDate(rs.getDate("batasKembali"));
            if (rs.getDate("tanggalKembali") != null) {
                tanggalKembali = parseDate(rs.getDate("tanggalKembali"));
            }

            String[] row = {
                rs.getString("idSewa"),
                rs.getString("noPolisi"),
                rs.getString("noKTP"),
                tanggalSewa,
                tanggalBatasKembali,
                tanggalKembali,
                rs.getString("subTotal"),
                rs.getString("denda")
            };

```

```

        Result_Sets.add(row);

        tanggalSewa = "";
        tanggalBatasKembali = "";
        tanggalKembali = "";
    }
} catch (Exception e) {
    System.out.println("Error inside `PenyewaanTableModel` method: "
        + e.getMessage());
}
}

```

```

@Override
public int getRowCount() {
    return Result_Sets.size();
}

```

```

@Override
public int getColumnCount() {
    return colnum;
}

```

```

@Override
public Object getValueAt(int rowIndex, int columnIndex) {
    String[] row = Result_Sets.get(rowIndex);
    return row[columnIndex];
}

```

```

@Override
public String getColumnName(int index) {
    return colname[index];
}

```



```

}

public int getNumberOfPage() {
    // [1] backup
    String tmp_select = (String) this.sql.select.get("select");
    int tmp_limit = (int) this.sql.select.get("limit");
    int tmp_offset = (int) this.sql.select.get("offset");

    // [2] change
    this.sql.select.select("count(idSewa) as num_rows");
    this.sql.select.removeLimit();
    ResultSet rs = this.sql.select.execute();

    int num_page = -1;
    try {
        rs.next();
        int num_rows = rs.getInt("num_rows");

        num_page = (int) Math.ceil(num_rows / (double) this.dataPerPage);
    } catch (SQLException e) {
        System.out.println("Error inside `getNumberOfPageByLimit` method: "
            + e.getMessage());
    } finally {
        this.sql.mdbc.close(rs);

        // [3] recover
        this.sql.select.select(tmp_select);
        this.sql.select.limit(tmp_limit);
        this.sql.select.offset(tmp_offset);
    }

    return num_page;
}

```

```
}
```

```
public String parseDate(Date d) throws ParseException {
```

```
    String result = "";
```

```
    try {
```

```
        String dateString = d.toString();
```

```
        SimpleDateFormat inputFormat = new SimpleDateFormat("yyyy-MM-dd", Locale.US);
```

```
        Date date = (Date) inputFormat.parse(dateString);
```

```
        SimpleDateFormat outputFormat = new SimpleDateFormat("dd-MM-yyyy", Locale.US);
```

```
        result = outputFormat.format(date);
```

```
    } catch (ParseException e) {
```

```
        System.out.println("Error inside `parseDate`: "
```

```
            + e.getMessage());
```

```
    }
```

```
    return result;
```

```
}
```

```
public boolean isCarAlreadyReturned(int rowIndex) {
```

```
    String[] row = Result_Sets.get(rowIndex);
```

```
    String tanggalKembali = row[4];
```

```
    if (tanggalKembali.equals("")) return false;
```

```
    return true;
```

```
}
```

```
}
```

```
./model/PelangganTableModel.java
```

```
/*
```

```
* 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 belajardatabase.model;
```

```
import static belajardatabase.model.MobilTableModel.table;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import java.text.ParseException;
```

```
import java.text.SimpleDateFormat;
```

```
import java.util.ArrayList;
```

```
import java.util.Locale;
```

```
import java.util.Date;
```

```
/**
```

```
*
```

```
* @author ASEP
```

```
*/
```

```
public class PelangganTableModel extends MyAbstractModel {
```

```
    public static final String    table    = "pelanggan";
```

```
    public static final int      dataPerPage = 5;
```

```
    private int colnum = 10;
```

```
    private int rownum;
```

```
    private String[] colname = {
```

```
        "noKTP",
```

```
        "nama",
```

```
        "tanggalLahir",
```

```
        "pekerjaan",
```

```
        "alamat",
```

```
        "jenisKelamin",
```

```

        "idKota",
        "telepon",
        "handphone",
        "email"
    };

    private ArrayList<String[]> Result_Sets;

    public PelangganTableModel() {
        super("*", table);
    }

    public void save(ResultSet rs) {
        Result_Sets = new ArrayList<String[]>();
        String tanggalLahir = "";
        try {
            while (rs.next()) {
                tanggalLahir = parseDate(rs.getDate("tanggalLahir"));
                String[] row = {
                    rs.getString("noKTP"),
                    rs.getString("nama"),
                    tanggalLahir,
                    rs.getString("pekerjaan"),
                    rs.getString("alamat"),
                    rs.getString("jenisKelamin"),
                    rs.getString("idKota"),
                    rs.getString("telepon"),
                    rs.getString("handphone"),
                    rs.getString("email")
                };
                Result_Sets.add(row);
            }
        }
    }

```

```

    } catch (Exception e) {
        System.out.println("Error inside `PelangganTableModel` method: "
            + e.getMessage());
    }
}

```

```

@Override
public int getRowCount() {
    return Result_Sets.size();
}

```

```

@Override
public int getColumnCount() {
    return colnum;
}

```

```

@Override
public Object getValueAt(int rowIndex, int columnIndex) {
    String[] row = Result_Sets.get(rowIndex);
    return row[columnIndex];
}

```

```

@Override
public String getColumnName(int index) {
    return colname[index];
}

```

```

public int getNumberOfPage() {
    // [1] backup
    String tmp_select = (String) this.sql.select.get("select");
    int tmp_limit = (int) this.sql.select.get("limit");
}

```

```

int tmp_offset    = (int) this.sql.select.get("offset");

// [2] change
this.sql.select.select("count(noKTP) as num_rows");
this.sql.select.removeLimit();
ResultSet rs = this.sql.select.execute();

int num_page = -1;
try {
    rs.next();

    int num_rows = rs.getInt("num_rows");

    num_page = (int) Math.ceil(num_rows / (double) this.dataPerPage);
} catch (SQLException e) {
    System.out.println("Error inside `getNumberOfPageByLimit` method: "
        + e.getMessage());
} finally {
    this.sql.mdbc.close(rs);

    // [3] recover
    this.sql.select.select(tmp_select);
    this.sql.select.limit(tmp_limit);
    this.sql.select.offset(tmp_offset);
}

return num_page;
}

public String parseDate(Date d) throws ParseException {
    String result = "";

```

```

try {
    String dateString = d.toString();

    SimpleDateFormat inputFormat = new SimpleDateFormat("yyyy-MM-dd", Locale.US);
    Date date = (Date) inputFormat.parse(dateString);
    SimpleDateFormat outputFormat = new SimpleDateFormat("dd-MM-yyyy", Locale.US);
    result = outputFormat.format(date);
} catch (ParseException e) {
    System.out.println("Error inside `parseDate`: "
        + e.getMessage());
}
return result;
}

/* constant property */
public static final int PRIA = 0;
public static final int PEREMPUAN = 1;
}

./model/KotaTableModel.java
/*
 * 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 belajardatabase.model;

import static belajardatabase.model.PelangganTableModel.table;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.ArrayList;

```

```

/**
 *
 * @author ASEP
 */
public class KotaTableModel extends MyAbstractModel {

    public static final String    table    = "kota";

    private int colnum = 2;
    private int rownum;
    private String[] colname = {
        "idKota",
        "namaKota",
    };
    private ArrayList<String[]> Result_Sets;

    public KotaTableModel() {
        super("", table);
    }

    public void save(ResultSet rs) {
        Result_Sets = new ArrayList<String[]>();

        try {

            while (rs.next()) {
                String[] row = {
                    rs.getString("idKota"),
                    rs.getString("namaKota")
                };
                Result_Sets.add(row);
            }
        }
    }
}

```



```

    }
} catch (Exception e) {
    System.out.println("Error inside `kotaTableModel` method: "
        + e.getMessage());
}
}

```

```

@Override
public int getRowCount() {
    return Result_Sets.size();
}

```

```

@Override
public int getColumnCount() {
    return colnum;
}

```

```

@Override
public Object getValueAt(int rowIndex, int columnIndex) {
    String[] row = Result_Sets.get(rowIndex);
    return row[columnIndex];
}

```

```

@Override
public String getColumnName(int index) {
    return colname[index];
}

```

```

public String getNamaKotaById(int idKota) {
    ResultSet rs = null;
    String namaKota = "";

```

```

try {
    sql.select.reset();
    sql.select.where("idKota", "=", idKota);

    rs = sql.select.execute();
    rs.next();
    namaKota = rs.getString("namaKota");
} catch (SQLException e) {
    System.out.println("Error inside `getNamaKotaById` method: "
        + e.getMessage());
} finally {
    sql.getConnection().close(rs);
}

return namaKota;
}

```

```

public int getIdKotaByNamaKota(String namaKota) {
    ResultSet rs = null;
    int idKota = -1;

    try {
        sql.select.reset();
        sql.select.where("namaKota", "=", namaKota);

        rs = sql.select.execute();
        rs.next();
        idKota = rs.getInt("idKota");
    } catch (SQLException e) {

```

```

        System.out.println("Error inside `getIdKotaByNamaKota` method: "
            + e.getMessage());
    } finally {
        sql.getConnection().close(rs);
    }

    return idKota;
}
}
./model/MyAbstractModel.java
/*
 * 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 belajardatabase.model;

import belajardatabase.mysqllop.SQLHandler;
import java.sql.ResultSet;
import javax.swing.table.AbstractTableModel;

/**
 * Every model class have @var sql properties and extend from
 * AbstractTableModel abstract class. But if I need to use that properties
 * for every model in another class, I can't access it.
 * So, I have to make a 'contract'
 *
 * In the end, every model must extend this instead of
 * AbstractTableModel abstract class.

```

```

*

* @author ASEP

*/

public abstract class MyAbstractModel extends AbstractTableModel {

    public SQLHandler sql;


    public MyAbstractModel(String selectSQL, String table) {
        this.sql = new SQLHandler(selectSQL, table);
    }


    public abstract void save(ResultSet rs);
}

./mysqllop/InsertSQL.java
/*
* 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 belajardatabase.mysqllop;

import java.sql.SQLException;
import java.sql.Statement;

/**
*
* @author ASEP
*/
public class InsertSQL {

    private String table = "";
    private String columns = "";

```

```

private String values = "";

public InsertSQL(MyDBConnection mdbc, Statement stmt, String table) {
    this.table = table;

    this.mdbc = mdbc;
    this.stmt = stmt;
}

public void reset() {
    columns = "";
    values = "";
}

/**
 * Add value
 *
 * @param column
 * @param value
 */
public void value(String column, String value) {
    columns += column + ", ";
    values += "\"" + value + "\", ";
}

/**
 * Add value
 *
 * @param column
 * @param value
 */

```

```

public void value(String column, int value) {
    columns += column + ", ";
    values += value + ", ";
}

/**
 * VALUES SQL statement
 * 123
 * @return
 */
private String getValues() {
    // substring is for exclude the last comma separator
    return "(" + values.substring(0, values.length()-2) + ")";
}

/**
 * output: (columnn1, column2, ...)
 * @return
 */
private String getColumns() {
    return "(" + columns.substring(0, columns.length()-2) + ")";
}

/**
 * Execute UPDATE statement
 */
public boolean execute() {
    try {
        String query = "INSERT INTO " + table + " " + getColumns()
            + " VALUES " + getValues();
        System.out.println(query);
    }
}

```

```

        stmt.executeUpdate(query);
    } catch (SQLException e) {
        System.out.println("Error inside `execute` : "
            + e.getMessage());
        return false;
    }

    return true;
}

private MyDBConnection mdbc;
private Statement stmt;
}
./mysqllop/UpdateSQL.java
/*
 * 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 belajardatabase.mysqllop;

import java.sql.SQLException;
import java.sql.Statement;

/**
 * Handler for UPDATE sql statement
 * @author ASEP
 */
public class UpdateSQL {
    private String table = "";

```

```

private String _set = null;
private String _where = "";

public UpdateSQL(MyDBConnection mdbc, Statement stmt, String table) {
    this.table = table;

    this.mdbc = mdbc;
    this.stmt = stmt;
}

/**
 * Reset the SQL UPDATE query, so you can create new one.
 */
public void reset() {
    _set = null;
    _where = "";
}

/**
 * Add SET statement
 * Example:
 *     setUpdate("dendaPerJam", 150000);
 *     setUpdate("merk", "Avanza");
 * will generating query as:
 *     .. SET dendaPerJam = 150000, status = "Avanza"
 */
public void set(String column, Object value) {
    if (_set == null)
    {
        if (value instanceof Integer) {
            this._set = " SET " + column + " = " + value;

```



```

    }
    if (value instanceof String ) {
        this._set = " SET " + column + " = \"" + value + "\"";
    }
}
else
{
    setAgain(column, value);
}
}

```

```

private void setAgain(String column, Object value) {
    if (value instanceof Integer) {
        this._set += ", " + column + " = " + value;
    }
    if (value instanceof String ) {
        this._set += ", " + column + " = \"" + value + "\"";
    }
}

```

```

/**

```

```

 * Add WHERE clause to UPDATE statement

```

```

 */

```

```

public void where(String column, Object value) {
    if (value instanceof Integer) {
        this._where = " WHERE " + column + " = " + value;
    }
    if (value instanceof String ) {
        this._where = " WHERE " + column + " = \"" + value + "\"";
    }
}

```

```

/**
 * Execute UPDATE statement
 */
public boolean execute() {
    try {
        String query = "UPDATE " + table + "_set + _where;
        stmt.executeUpdate(query);
    } catch (SQLException e) {
        System.out.println("Error inside `execute` : "
            + e.getMessage());
        return false;
    }

    return true;
}

private MyDBConnection mddbc;
private Statement stmt;
}
./mysqllop/SQLHandler.java
/*
 * 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 belajardatabase.mysqllop;

import java.sql.Connection;
import java.sql.ResultSet;

```

```

import java.sql.SQLException;

import java.sql.Statement;


/**
 *
 * @author ASEP
 */
public class SQLHandler {

    public SelectSQL select = null;
    public UpdateSQL update = null;
    public DeleteSQL delete = null;
    public InsertSQL insert = null;


    /**
     * Constuctor
     * @param select is the first SELECT sql statement, you can change it later
     * @param table is database table
     */
    public SQLHandler(String selectSQL, String table) {
        initDBConnection();

        select = new SelectSQL(mdbc, stmt, selectSQL, table);
        update = new UpdateSQL(mdbc, stmt, table);
        delete = new DeleteSQL(mdbc, stmt, table);
        insert = new InsertSQL(mdbc, stmt, table);
    }


    public void initDBConnection() {
        mdbc = new MyDBConnection();
        mdbc.init();
        Connection conn = mdbc.getMyConnection();
    }

```

```

    try {
        stmt = conn.createStatement();
    } catch (SQLException e) {
        System.out.println("Error inside `initDBConnection` : "
            + e.getMessage());
    }
}

/**
 * call this when you not needed the DB connection
 *
 */
public void closeDBConnection() {
    mdbc.close(stmt);
    mdbc.destroy();
}

public MyDBConnection getConnection() {
    return mdbc;
}

public MyDBConnection mdbc;
private Statement stmt;
}

```

```
./mysqllop/SelectSQL.java
```

```
/*
```

```
 * 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 belajardatabase.mysqllop;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import java.sql.Statement;
```

```
/**
```

```
 * Handler for SELECT sql statement
```

```
 * @author ASEP
```

```
*/
```

```
public class SelectSQL {
```

```
    private String _select = "";
```

```
    private String _from = "";
```

```
    private String _where = "1=1";
```

```
    private int _limit = -1;
```

```
    private int _offset = -1;
```

```
    public SelectSQL(
```

```
        MyDBConnection mdhc,
```

```
        Statement stmt,
```

```

        String selectSQL,
        String table
    ){
        this.mdbc = mdbc;
        this.stmt = stmt;

        select(selectSQL);
        from(table);
    }

    public void select(String select) {
        this._select = select;
    }

    public void from(String table) {
        this._from = table;
    }

    public void limit(int dataPerPage) {
        this._limit = dataPerPage;
    }

    public void offset(int offset) {
        this._offset = offset;
    }

    public void removeLimit() {
        this._limit = -1;
        this._offset = -1;
    }

```

```

/* In case you need these properties */
public Object get(String prop) {
    switch (prop) {
        case "select": return (Object) this._select;
        case "from": return (Object) this._from;
        case "where": return (Object) this._where;
        case "limit": return (Object) this._limit;
        case "offset": return (Object) this._offset;
    }
    return null;
}

/**
 * Reset the SQL SELECT query, so you can create new one.
 */
public void reset() {
    this._where = "1=1";
    this._limit = -1;
}

/**
 * Start the segment sign.
 * This is useful when using with removeWhereBySegment() method
 *
 * The example output is:
 *   AND /# EXAMPLE START #/ (
 *
 * Note: I change `` to be `#` to avoid error in java comment
 *
 * @param sign
 */

```

```

public void whereSegmentStart(String sign) {
    this._where += " AND /* " + sign + " START */ (";
}

/**
 * End the segment sign
 *
 * The example output is:
 * ) /# EXAMPLE END #/
 *
 *
 * Note: I change `*` to be `#` to avoid error in java comment
 *
 * @param sign
 */
public void whereSegmentEnd(String sign) {
    this._where += ") /* " + sign + " END */ ";
}

/**
 * Example:
 * WHERE merk = "toyota" AND /# CON START #/ (status = 0) /# CON END #/
 * Then to remove CON segment, just call removeWhereBySegmentSign("CON").
 * The result is:
 * WHERE merk = "toyota"
 *
 * Note: I change `*` to be `#` to avoid error in java comment
 *
 * @param sign
 */
public void removeWhereBySegmentSign(String sign) {

```



```

int startIndex = this._where
    .indexOf(" AND /* " + sign + " START */ (");

int endIndex = this._where
    .indexOf(") /* " + sign + " END */");

int segmentEndLength = (") /* " + sign + " END */").length();
endIndex += segmentEndLength;

if (startIndex == -1 || endIndex == -1) return;

// gets the where query owned by current segment
String target = this._where.substring(startIndex, endIndex);

// remove
this._where = this._where.replace(target, "");
}

/**
 * just once called for every WHERE SELECT SQL and,
 * every Grouping WHERE SELECT SQL
 *
 * Example:
 *   where('dendaPerJam', '>=', 150000);
 * will generating query as:
 *   .. WHERE dendaPerJam >= 150000
 * for Grouping WHERE SQL example, see method `whereGroupingStart`
 */
public void where(String column, String operator, Object value) {
    System.out.println("where = " + this._where);
    if (this._where.equals("1=1")) {
        System.out.println("hello world");
    }
}

```

```

        this._where += " AND ";
    }

    if (value instanceof Integer) {
        addWhere(column, operator, (int) value, null);
    }
    if (value instanceof String) {
        addWhere(column, operator, (String) value, null);
    }
}

/**
 * Add to WHERE SELECT SQL with prefixed by AND sql operator
 * Example:
 *   andWhere("dendaPerJam", ">=", 150000);
 * will generating query as:
 *   .. AND dendaPerJam >= 150000
 */
public void andWhere(String column, String operator, Object value) {
    if (value instanceof Integer) {
        addWhere(column, operator, (int) value, "AND");
    }
    if (value instanceof String) {
        addWhere(column, operator, (String) value, "AND");
    }
}

/**
 * Add to WHERE SELECT SQL with prefixed by OR sql operator
 * Example:
 *   orWhere("dendaPerJam", ">=", 150000);

```

```

* will generating query as:
*    .. OR dendaPerJam >= 150000
*/
public void orWhere(String column, String operator, Object value) {
    if (value instanceof Integer) {
        addWhere(column, operator, (int) value, "OR");
    }
    if (value instanceof String) {
        addWhere(column, operator, (String) value, "OR");
    }
}

/**
* Starting the Grouping WHERE SELECT SQL
* Example:
*    whereGroupingStart("AND");
* will generating query as:
*    .. AND ( ..
* as you can see, you must calling where() method after that
*/
public void whereGroupingStart(String booleanOperator) {
    this._where += " " + booleanOperator + " " + "(";
}

/**
* Close the Grouping WHERE SELECT SQL
*/
public void whereGroupingEnd() {
    this._where += ")";
}

```

```

/**
 * @param column
 * @param operator
 * @param value
 * @param booleanOperator
 */
private void addWhere(
    String column,
    String operator,
    int value,
    String booleanOperator
){
    if (booleanOperator != null) {
        this._where += " " + booleanOperator + " ";
    }
    this._where += column + " " + operator + " " + value;
}

```

```

/**
 * @param column
 * @param operator
 * @param value
 * @param booleanOperator
 */
private void addWhere(
    String column,
    String operator,
    String value,
    String booleanOperator
){
    if (booleanOperator != null) {

```

```

        this._where += " " + booleanOperator + " ";
    }
    this._where += column + " " + operator + " \"" + value + "\"";
}

```

```

public ResultSet execute() {
    ResultSet rs = null;

    try {
        String query = combineClause();

        System.out.println("Executed SQL is " + query);

        rs = stmt.executeQuery(query);
    } catch (SQLException e) {
        System.out.println("Error inside `getResultFromMobil` : "
            + e.getMessage());
    } catch (Exception e) {
        System.out.println("Error inside `combineClause` : "
            + e.getMessage());
    }

    return rs;
}

```

```

/**
 * Return complete SQL statement that can be send to database
 * @return query
 * @throws Exception
 */
private String combineClause() throws Exception {

```

```

        if (_select.equals("") || _from.equals("")) {
            throw new Exception("select property can't be empty");
        }
        if ((_limit > -1 && _offset == -1) || (_limit == -1 && _offset > -1)) {
            throw new Exception("limit/offset is set but another is not");
        }

        String query = "";
        query    += " SELECT " + _select;
        query    += " FROM " + _from;
        if (!_where.equals("")) query += " WHERE " + _where;
        if (_limit > -1) query += " LIMIT " + _limit + " OFFSET " + _offset;

        return query;
    }

    private MyDBConnection mdbc;
    private Statement stmt;
}

./mysqllop/MyDBConnection.java
/*
 * 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 belajardatabase.mysqllop;

import java.sql.*;

/**

```

```

*
* @author ASEP
*/
public class MyDBConnection {
    private String driver = "com.mysql.jdbc.Driver";
    private String url =
"jdbc:mysql://localhost/penyewaan_mobil?zeroDateTimeBehavior=convertToNull";
    private String username = "root";
    private String password = "";
    private Connection conn = null;

    public void myDBConnection() {
        // empty
    }

    public void init() {
        try {
            Class.forName(driver);
            conn = DriverManager.getConnection(url, username, password);
        }
        catch (Exception e) {
            System.out.println("Error : " + e.getMessage());
        }
    }

    public Connection getMyConnection() {
        return conn;
    }

    public void close(ResultSet rs) {
        if (rs != null) {

```

```

try {
    rs.close();
} catch (Exception e) {
    System.out.println("Error inside `close` method : "
        + e.getMessage());
    }
}
}

```

```

public void close(java.sql.Statement stmt) {
    if (stmt != null) {
        try {
            stmt.close();
        } catch (Exception e) {
            System.out.println("Error inside `close` method : "
                + e.getMessage());
        }
    }
}
}

```

```

public void destroy() {
    if (conn != null) {
        try {
            conn.close();
        } catch (Exception e) {
            System.out.println("Error inside `destroy` method : "
                + e.getMessage());
        }
    }
}
}
}

```



```

./mysqllop/DeleteSQL.java

/*
 * 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 belajardatabase.mysqllop;

import java.sql.SQLException;
import java.sql.Statement;

public class DeleteSQL {
    private String table = "";
    private String _where = "";

    public DeleteSQL(MyDBConnection mdbc, Statement stmt, String table) {
        this.table = table;

        this.mdbc = mdbc;
        this.stmt = stmt;
    }

    /**
     * Add WHERE clause to DELETE statement
     */
    public void where(String column, Object value) {
        if (value instanceof Integer) {
            this._where = " WHERE " + column + " = " + value;
        }
        if (value instanceof String ) {

```

```

        this._where = " WHERE " + column + " = \"" + value + "\"";
    }
}

```

```

public boolean execute() {
    try {
        String query = "DELETE FROM " + table + _where;
        stmt.executeUpdate(query);
    } catch (SQLException e) {
        System.out.println("Error inside `execute` : "
            + e.getMessage());
        return false;
    }
}

```

```

    return true;
}

```

```

private MyDBConnection mdbc;
private Statement stmt;
}

```

./pelanggan/Entry.java

/*

* 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 belajardatabase.pelanggan;

```

```

import belajardatabase.model.KotaTableModel;

```

```

import belajardatabase.model.PelangganTableModel;

```

```

import java.sql.ResultSet;

import javax.swing.JOptionPane;

/**
 *
 * @author ASEP
 */
public class Entry extends javax.swing.JPanel {

    PelangganTableModel model    = null;

    KotaTableModel    kotaModel = null;

    javax.swing.JFrame frame    = null;

    /**
     * Creates new form entry
     */
    public Entry(javax.swing.JFrame frame) {

        this.frame = frame;

        initComponents();

        initModel();

        // init kota combobox

        ResultSet rs = kotaModel.sql.select.execute();

        kotaModel.save(rs);

        kotaModel.sql.getConnection().close(rs);

        for (int i = 0; i < kotaModel.getRowCount(); i++)

            kotaComboBox.addItem(kotaModel.getValueAt(i, 1).toString());

        // listen when mainWindow is closed

        frame.addWindowListener(new java.awt.event.WindowAdapter() {

            @Override

```

```

        public void windowClosing(java.awt.event.WindowEvent windowEvent) {

            model.sql.closeDBConnection();

            kotaModel.sql.closeDBConnection();

        }

    });

}

public void initModel() {

    model = new PelangganTableModel();

    kotaModel = new KotaTableModel();

}

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN: initComponents
private void initComponents() {

    jPanel2 = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    noKTPField = new javax.swing.JTextField();
    jLabel2 = new javax.swing.JLabel();
    namaField = new javax.swing.JTextField();
    jLabel3 = new javax.swing.JLabel();
    jPanel1 = new javax.swing.JPanel();
    priaRadioButton = new javax.swing.JRadioButton();
    wanitaRadioButton = new javax.swing.JRadioButton();
    jLabel4 = new javax.swing.JLabel();

```

```

jPanel3 = new javax.swing.JPanel();
hariField = new javax.swing.JTextField();
bulanField = new javax.swing.JTextField();
tahunField = new javax.swing.JTextField();
jLabel5 = new javax.swing.JLabel();
pekerjaanField = new javax.swing.JTextField();
jLabel6 = new javax.swing.JLabel();
alamatField = new javax.swing.JTextField();
jLabel7 = new javax.swing.JLabel();
kotaComboBox = new javax.swing.JComboBox<String>();
jLabel8 = new javax.swing.JLabel();
teleponField = new javax.swing.JTextField();
jLabel9 = new javax.swing.JLabel();
noHPField = new javax.swing.JTextField();
jLabel10 = new javax.swing.JLabel();
emailField = new javax.swing.JTextField();
jPanel4 = new javax.swing.JPanel();
jPanel5 = new javax.swing.JPanel();
simpanButton = new javax.swing.JButton();
resetButton = new javax.swing.JButton();

setMaximumSize(new java.awt.Dimension(626, 666));
setMinimumSize(new java.awt.Dimension(626, 666));
setPreferredSize(new java.awt.Dimension(626, 666));

jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Form Tambah
Pelanggan", javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Tahoma", 0, 11), new
java.awt.Color(51, 51, 51))); // NOI18N

jPanel2.setForeground(new java.awt.Color(51, 51, 51));
jPanel2.setPreferredSize(new java.awt.Dimension(388, 300));
jPanel2.setLayout(new java.awt.GridLayout(11, 2, 0, 10));

```

```
jLabel1.setText("No. KTP");
```

```
jPanel2.add(jLabel1);
```

```
noKTPField.setName("no_ktp"); // NOI18N
```

```
jPanel2.add(noKTPField);
```

```
jLabel2.setText("Nama");
```

```
jPanel2.add(jLabel2);
```

```
namaField.setName("nama"); // NOI18N
```

```
jPanel2.add(namaField);
```

```
jLabel3.setText("Jenis Kelamin");
```

```
jPanel2.add(jLabel3);
```

```
jPanel1.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
priaRadioButton.setSelected(true);
```

```
priaRadioButton.setText("L");
```

```
priaRadioButton.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        priaRadioButtonActionPerformed(evt);
```

```
    }
```

```
});
```

```
jPanel1.add(priaRadioButton);
```

```
wanitaRadioButton.setText("P");
```

```
wanitaRadioButton.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        wanitaRadioButtonActionPerformed(evt);
```

```

    }
});

jPanel1.add(wanitaRadioButton);

jPanel2.add(jPanel1);

jLabel4.setText("Tanggal Lahir");
jPanel2.add(jLabel4);

jPanel3.setLayout(new java.awt.GridLayout(1, 3, 10, 0));

hariField.setText("HH");
jPanel3.add(hariField);

bulanField.setText("MM");
jPanel3.add(bulanField);

tahunField.setText("TTTT");
jPanel3.add(tahunField);

jPanel2.add(jPanel3);

jLabel5.setText("Pekerjaan");
jPanel2.add(jLabel5);

pekerjaanField.setName("pekerjaan"); // NOI18N
jPanel2.add(pekerjaanField);

jLabel6.setText("Alamat");
jPanel2.add(jLabel6);

```

```
alamatField.setName("alamat"); // NOI18N
```

```
jPanel2.add(alamatField);
```

```
jLabel7.setText("Kota");
```

```
jPanel2.add(jLabel7);
```

```
kotaComboBox.setName("kotaComboBox"); // NOI18N
```

```
kotaComboBox.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        kotaComboBoxActionPerformed(evt);
```

```
    }
```

```
});
```

```
jPanel2.add(kotaComboBox);
```

```
jLabel8.setText("Telepon");
```

```
jPanel2.add(jLabel8);
```

```
teleponField.setName("telepon"); // NOI18N
```

```
jPanel2.add(teleponField);
```

```
jLabel9.setText("No. HP");
```

```
jPanel2.add(jLabel9);
```

```
noHPField.setName("no_hp"); // NOI18N
```

```
jPanel2.add(noHPField);
```

```
jLabel10.setText("Email");
```

```
jPanel2.add(jLabel10);
```

```
emailField.setName("email"); // NOI18N
```

```
jPanel2.add(emailField);
```



```

javax.swing.GroupLayout jPanel4Layout = new javax.swing.GroupLayout(jPanel4);
jPanel4.setLayout(jPanel4Layout);
jPanel4Layout.setHorizontalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGap(0, 170, Short.MAX_VALUE)
);
jPanel4Layout.setVerticalGroup(
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGap(0, 26, Short.MAX_VALUE)
);

jPanel2.add(jPanel4);

jPanel5.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

simpanButton.setText("SIMPAN");
simpanButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        simpanButtonActionPerformed(evt);
    }
});
jPanel5.add(simpanButton);

resetButton.setText("RESET");
resetButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        resetButtonActionPerformed(evt);
    }
});
jPanel5.add(resetButton);

```

```

jPanel2.add(jPanel5);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 352,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(264, 264, 264))
        );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 416,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(239, 239, 239))
        );
} // </editor-fold> // GEN-END: initComponents

private void kotaComboBoxActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_kotaComboBoxActionPerformed
    // TODO add your handling code here:
} // GEN-LAST:event_kotaComboBoxActionPerformed

private void simpanButtonActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_simpanButtonActionPerformed
    int jenkel = PelangganTableModel.PEREMPUAN;
    if (priaRadioButton.isSelected()) jenkel = PelangganTableModel.PRIA;
} // GEN-LAST:event_simpanButtonActionPerformed

```

```

String tanggalLahir = tahunField.getText() + "-" + bulanField.getText()
    + "-" + hariField.getText();

String namaKota = kotaComboBox.getSelectedItem().toString();
int idKota = kotaModel.getIdKotaByNamaKota(namaKota);

model.sql.insert.reset();
model.sql.insert.value("noKTP", noKTPField.getText());
model.sql.insert.value("nama", namaField.getText());
model.sql.insert.value("jenisKelamin", jenkel);
model.sql.insert.value("tanggalLahir", tanggalLahir);
model.sql.insert.value("pekerjaan", pekerjaanField.getText());
model.sql.insert.value("alamat", alamatField.getText());
model.sql.insert.value("idKota", idKota);
model.sql.insert.value("telepon", teleponField.getText());
model.sql.insert.value("handphone", noHPField.getText());
model.sql.insert.value("email", emailField.getText());

boolean success = model.sql.insert.execute();

String pesan = "Gagal menambah data";
if (success) pesan = "Sukses menambah data";

JOptionPane.showMessageDialog(frame, pesan);

if (success) reset();

} //GEN-LAST:event_simpanButtonActionPerformed

```

```

    private void priaRadioButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_priaRadioButtonActionPerformed

        wanitaRadioButton.setSelected(false);

    } //GEN-LAST:event_priaRadioButtonActionPerformed


    private void wanitaRadioButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_wanitaRadioButtonActionPerformed

        priaRadioButton.setSelected(false);

    } //GEN-LAST:event_wanitaRadioButtonActionPerformed


    private void resetButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_resetButtonActionPerformed

        reset();

    } //GEN-LAST:event_resetButtonActionPerformed


    public void reset() {

        noKTPField.setText("");

        namaField.setText("");

        priaRadioButton.setSelected(true);

        wanitaRadioButton.setSelected(false);

        tahunField.setText("");

        bulanField.setText("");

        hariField.setText("");

        pekerjaanField.setText("");

        alamatField.setText("");

        kotaComboBox.setSelectedIndex(0);

        teleponField.setText("");

        noHPField.setText("");

        emailField.setText("");

    }


    // Variables declaration - do not modify //GEN-BEGIN:variables

```

```
private javax.swing.JTextField alamatField;
private javax.swing.JTextField bulanField;
private javax.swing.JTextField emailField;
private javax.swing.JTextField hariField;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
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 jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel5;
private javax.swing.JComboBox<String> kotaComboBox;
private javax.swing.JTextField namaField;
private javax.swing.JTextField noHPField;
private javax.swing.JTextField noKTPField;
private javax.swing.JTextField pekerjaanField;
private javax.swing.JRadioButton priaRadioButton;
private javax.swing.JButton resetButton;
private javax.swing.JButton simpanButton;
private javax.swing.JTextField tahunField;
private javax.swing.JTextField teleponField;
private javax.swing.JRadioButton wanitaRadioButton;
// End of variables declaration//GEN-END:variables
```

```

}

./pelanggan/Delete.java

/*
 * 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 belajardatabase.pelanggan;

import belajardatabase.mobil.*;
import belajardatabase.model.MobilTableModel;
import belajardatabase.model.PelangganTableModel;
import belajardatabase.model.PenyewaanTableModel;
import java.sql.ResultSet;
import javax.swing.JOptionPane;

/**
 *
 * @author ASEP
 */
public class Delete {

    public static void delete(String noKTP, javax.swing.JFrame frame) {
        PelangganTableModel model = new PelangganTableModel();

        if (penyewaanRelatedToPelanggan(noKTP) > 0) {
            JOptionPane.showMessageDialog(
                frame,
                "Tidak bisa menghapus pelanggan yang pernah/sedang melakukan sewa"
                + "\nKecuali semua riwayat sewa berkaitan denganpelanggan inidihapus"
            );
        }
    }
}

```

```

        );
    } else {
        model.sql.delete.where("noKTP", noKTP);
        boolean success = model.sql.delete.execute();
        String pesan = "Penghapusan gagal";

        if (success) pesan = "Penghapusan berhasil";

        JOptionPane.showMessageDialog(frame, pesan);
    }
}

public static int penyewaanRelatedToPelanggan(String noKTP) {
    PenyewaanTableModel model = new PenyewaanTableModel();

    model.sql.select.where("noKTP", "=", noKTP);
    ResultSet rs = model.sql.select.execute();
    model.save(rs);
    model.sql.getConnection().close(rs);

    return model.getRowCount();
}
}

./pelanggan/View.java
/*
 * 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 belajardatabase.pelanggan;

```

```

import belajardatabase.model.KotaTableModel;
import belajardatabase.model.PelangganTableModel;
import belajardatabase.utilities.Pagination;
import belajardatabase.utilities.PaginationGUIComponent;
import java.awt.event.ItemEvent;
import java.sql.ResultSet;
import javax.swing.JOptionPane;
import javax.swing.SwingUtilities;
import javax.swing.table.TableColumn;

```

```

/**
 *
 * @author ASEP
 */
public class View extends javax.swing.JPanel {

    PelangganTableModel model    = null;
    Pagination    pagination = null;

    private javax.swing.JFrame frame = null;

    /**
     * Creates new form view
     */
    public View(javax.swing.JFrame frame) {
        this.frame = frame;

        initComponents();
        initModel();
        initPagination();
        initTable();
    }

```



```

// listen when mainWindow is closed

frame.addWindowListener(new java.awt.event.WindowAdapter() {

    @Override

    public void windowClosing(java.awt.event.WindowEvent windowEvent) {

        model.sql.closeDBConnection();

    }

});
}

```

```

public void initModel() {

    model = new PelangganTableModel();


    model.sql.select.limit(model.dataPerPage);
    model.sql.select.offset(0);


    ResultSet rs = model.sql.select.execute();
    model.save(rs);
    model.sql.getConnection().close(rs);
}

```

```

public void initPagination() {

    pagination = new Pagination();
    pagination.setModel(model);
    pagination.setPageLength(model.dataPerPage);
    pagination.GUIComponent.setLabel(positionPaginationLabel);
    pagination.GUIComponent.setComboBox(paginationComboBox);
    pagination.init();
}

```

```

public void initTable() {

```

```

viewTable.setModel(model);

// leave only 4 column in table
for (int i = 4; i < model.getColumnCount(); i++) {
    TableColumn col = viewTable.getColumnModel().getColumn(4);
    viewTable.getColumnModel().removeColumn(col);
}

updateTable();
}

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    pencarianField = new javax.swing.JTextField();
    jLabel2 = new javax.swing.JLabel();
    viewScrollPane = new javax.swing.JScrollPane();
    viewTable = new javax.swing.JTable();
    lastPaginationButton = new javax.swing.JButton();
    nextPaginationButton = new javax.swing.JButton();
    paginationComboBox = new javax.swing.JComboBox();
    previousPaginationButton = new javax.swing.JButton();
    firstPaginationButton = new javax.swing.JButton();
    positionPaginationLabel = new javax.swing.JLabel();
    dataDetailPanel = new javax.swing.JPanel();

```

```
jPanel4 = new javax.swing.JPanel();
jLabel8 = new javax.swing.JLabel();
noKTPField = new javax.swing.JTextField();
jPanel3 = new javax.swing.JPanel();
jLabel12 = new javax.swing.JLabel();
pekerjaanField = new javax.swing.JTextField();
jPanel2 = new javax.swing.JPanel();
jLabel10 = new javax.swing.JLabel();
namaField = new javax.swing.JTextField();
jPanel11 = new javax.swing.JPanel();
jLabel14 = new javax.swing.JLabel();
alamatField = new javax.swing.JTextField();
jPanel8 = new javax.swing.JPanel();
jLabel18 = new javax.swing.JLabel();
jenisKelaminField = new javax.swing.JTextField();
jPanel9 = new javax.swing.JPanel();
jLabel16 = new javax.swing.JLabel();
kotaField = new javax.swing.JTextField();
jPanel10 = new javax.swing.JPanel();
jLabel19 = new javax.swing.JLabel();
tanggalLahirField = new javax.swing.JTextField();
jPanel12 = new javax.swing.JPanel();
jLabel21 = new javax.swing.JLabel();
teleponField = new javax.swing.JTextField();
jPanel14 = new javax.swing.JPanel();
jLabel20 = new javax.swing.JLabel();
noHPField = new javax.swing.JTextField();
jPanel15 = new javax.swing.JPanel();
jLabel22 = new javax.swing.JLabel();
emailField = new javax.swing.JTextField();
jPanel13 = new javax.swing.JPanel();
```

```

ubahButton = new javax.swing.JButton();

hapusButton = new javax.swing.JButton();

setSize(new java.awt.Dimension(626, 666));
setMinimumSize(new java.awt.Dimension(626, 666));
setPreferredSize(new java.awt.Dimension(626, 666));

pencarianField.setToolTipText("Kotak Pencarian");

pencarianField.setBorder(javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFactory.createBevelBorder(javax.swing.border.BevelBorder.LOWERED, java.awt.Color.white, java.awt.Color.white, java.awt.Color.white, java.awt.Color.lightGray), javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFactory.createEmptyBorder(0, 5, 0, 5), javax.swing.BorderFactory.createMatteBorder(0, 0, 0, 16, new javax.swing.ImageIcon("C:\\Users\\ASEP\\Downloads\\1498141047_icon-111-search.png"))))); // NOI18N

pencarianField.setMargin(new java.awt.Insets(0, 0, 0, 0));

pencarianField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        pencarianFieldActionPerformed(evt);
    }
});

jLabel2.setText("Pencarian :");

viewTable.setAutoResizeMode(javax.swing.JTable.AUTO_RESIZE_ALL_COLUMNS);
viewTable.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        viewTableMouseClicked(evt);
    }
});

viewScrollPane.setViewportView(viewTable);

```

```

lastPaginationButton.setText(">>");
lastPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        lastPaginationButtonActionPerformed(evt);
    }
});

```

```

nextPaginationButton.setText(">");
nextPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        nextPaginationButtonActionPerformed(evt);
    }
});

```

```

paginationComboBox.addItemListener(new java.awt.event.ItemListener() {
    public void itemStateChanged(java.awt.event.ItemEvent evt) {
        paginationComboBoxItemStateChanged(evt);
    }
});

```

```

previousPaginationButton.setText("<");
previousPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        previousPaginationButtonActionPerformed(evt);
    }
});

```

```

firstPaginationButton.setText("<<");
firstPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        firstPaginationButtonActionPerformed(evt);
    }
});

```

```

    }
});

positionPaginationLabel.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
positionPaginationLabel.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
positionPaginationLabel.setText("Halaman 1 dari 200");
positionPaginationLabel.setAlignmentX(0.5F);

dataDetailPanel.setBorder(javax.swing.BorderFactory.createTitledBorder("Informasi secara Detail"));

dataDetailPanel.setLayout(new java.awt.GridLayout(6, 2, 40, 10));

jPanel4.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel8.setText("No. KTP");
jPanel4.add(jLabel8);

noKTPField.setEditable(false);
noKTPField.setText("Pilih baris data");
jPanel4.add(noKTPField);

dataDetailPanel.add(jPanel4);

jPanel3.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel12.setText("Pekerjaan");
jPanel3.add(jLabel12);

pekerjaanField.setEditable(false);
pekerjaanField.setText("Pilih baris data");
jPanel3.add(pekerjaanField);

```

```
dataDetailPanel.add(jPanel3);
```

```
jPanel2.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel10.setText("Nama");
```

```
jPanel2.add(jLabel10);
```

```
namaField.setEditable(false);
```

```
namaField.setText("Pilih baris data");
```

```
jPanel2.add(namaField);
```

```
dataDetailPanel.add(jPanel2);
```

```
jPanel11.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel14.setText("Alamat");
```

```
jPanel11.add(jLabel14);
```

```
alamatField.setEditable(false);
```

```
alamatField.setText("Pilih baris data");
```

```
jPanel11.add(alamatField);
```

```
dataDetailPanel.add(jPanel11);
```

```
jPanel8.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel18.setText("Jenis Kelamin");
```

```
jPanel8.add(jLabel18);
```

```
jenisKelaminField.setEditable(false);
```

```
jenisKelaminField.setText("Pilih baris data");
jPanel8.add(jenisKelaminField);

dataDetailPanel.add(jPanel8);

jPanel9.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel16.setText("Kota");
jPanel9.add(jLabel16);

kotaField.setEditable(false);
kotaField.setText("Pilih baris data");
jPanel9.add(kotaField);

dataDetailPanel.add(jPanel9);

jPanel10.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel19.setText("Tanggal Lahir");
jPanel10.add(jLabel19);

tanggalLahirField.setEditable(false);
tanggalLahirField.setText("Pilih baris data");
jPanel10.add(tanggalLahirField);

dataDetailPanel.add(jPanel10);

jPanel12.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel21.setText("Telepon");
jPanel12.add(jLabel21);
```



```
teleponField.setEditable(false);
teleponField.setText("Pilih baris data");
jPanel12.add(teleponField);

dataDetailPanel.add(jPanel12);

jPanel14.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel20.setText("No. HP");
jPanel14.add(jLabel20);

noHPField.setEditable(false);
noHPField.setText("Pilih baris data");
jPanel14.add(noHPField);

dataDetailPanel.add(jPanel14);

jPanel15.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel22.setText("Email");
jPanel15.add(jLabel22);

emailField.setEditable(false);
emailField.setText("Pilih baris data");
jPanel15.add(emailField);

dataDetailPanel.add(jPanel15);

jPanel13.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```



```

        .addGroup(layout.createSequentialGroup())
        .addComponent(jLabel2)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(pencarianField, javax.swing.GroupLayout.PREFERRED_SIZE, 413,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(layout.createSequentialGroup())
        .addComponent(firstPaginationButton)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(previousPaginationButton)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(paginationComboBox, javax.swing.GroupLayout.PREFERRED_SIZE,
80, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(nextPaginationButton)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(lastPaginationButton)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(positionPaginationLabel,
javax.swing.GroupLayout.PREFERRED_SIZE, 169, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(viewScrollPane, javax.swing.GroupLayout.PREFERRED_SIZE, 608,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(0, 0, Short.MAX_VALUE)))
    .addGap(8, 8, 8))
);

layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup())
        .addGap(20, 20, 20)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel2)
            .addComponent(pencarianField, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

```

```

        .addComponent(viewScrollPane, javax.swing.GroupLayout.PREFERRED_SIZE, 136,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(previousPaginationButton, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

            .addComponent(firstPaginationButton)

            .addComponent(paginationComboBox, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

            .addComponent(nextPaginationButton)

            .addComponent(lastPaginationButton)

            .addComponent(positionPaginationLabel, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addComponent(dataDetailPanel, javax.swing.GroupLayout.PREFERRED_SIZE, 228,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(233, 233, 233))
    );
} // </editor-fold> // GEN-END: initComponents

```

```

private void pencarianFieldActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_pencarianFieldActionPerformed

```

```

    String searchText = pencarianField.getText();

```

```

    // reset where clause

```

```

    String sign = "USER SEARCH";

```

```

    model.sql.select.removeWhereBySegmentSign(sign);

```

```

    model.sql.select.whereSegmentStart(sign);

```

```

    model.sql.select.where("noKTP", "LIKE", "%" + searchText + "%");

```

```

    model.sql.select.orWhere("nama", "LIKE", "%" + searchText + "%");

```

```

    model.sql.select.orWhere("alamat", "LIKE", "%" + searchText + "%");

```

```

    model.sql.select.orWhere("telepon", "LIKE", "%" + searchText + "%");

```

```

model.sql.select.orWhere("handphone", "LIKE", "%" + searchText + "%");
model.sql.select.orWhere("email", "LIKE", "%" + searchText + "%");
model.sql.select.whereSegmentEnd(sign);

int newOffset = pagination.isSQLChanged.updatePagination();
pagination.isSQLChanged.GUIComponent.reinitComboBox();
pagination.GUIComponent.update();

model.sql.select.offset(newOffset);
ResultSet rs = model.sql.select.execute();
model.save(rs);
model.sql.getConnection().close(rs);

updateTable();
} //GEN-LAST:event_pencarianFieldActionPerformed

private void viewTableMouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_viewTableMouseClicked
    int row = viewTable.getSelectedRow();

    if (row != -1) {
        String noKTP = model.getValueAt(row, 0).toString();
        String nama = model.getValueAt(row, 1).toString();
        String tanggalLahir = model.getValueAt(row, 2).toString();
        String pekerjaan = model.getValueAt(row, 3).toString();
        String alamat = model.getValueAt(row, 4).toString();
        String jenisKelamin = model.getValueAt(row, 5).toString();
        String idKota = model.getValueAt(row, 6).toString();
        String telepon = model.getValueAt(row, 7).toString();
        String handphone = model.getValueAt(row, 8).toString();
        String email = model.getValueAt(row, 9).toString();
    }
}

```

```

int jenkel = Integer.valueOf(jenisKelamin);

KotaTableModel kotaModel = new KotaTableModel();

String namaKota = kotaModel.getNamaKotaById(
    Integer.valueOf(idKota)
);

noKTPField.setText(noKTP);
namaField.setText(nama);
if (jenkel == PelangganTableModel.PRIA) {
    jenisKelaminField.setText("Laki-laki");
} else {
    jenisKelaminField.setText("Perempuan");
}
tanggalLahirField.setText(tanggalLahir);
pekerjaanField.setText(pekerjaan);
alamatField.setText(alamat);
kotaField.setText(namaKota);
teleponField.setText(telepon);
noHPField.setText(handphone);
emailField.setText(email);

ubahButton.setEnabled(true);
hapusButton.setEnabled(true);
}
} //GEN-LAST:event_viewTableMouseClicked

private void lastPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_lastPaginationButtonActionPerformed
    int newOffset = pagination.jumpToLast();
    pagination.GUIComponent.update();
}

```

```

        model.sql.select.offset(newOffset);

        ResultSet rs = model.sql.select.execute();

        model.save(rs);

        model.sql.getConnection().close(rs);

        updateTable();
    } //GEN-LAST:event_lastPaginationButtonActionPerformed

    private void nextPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_nextPaginationButtonActionPerformed

        int newOffset = pagination.moveNext();

        pagination.GUIComponent.update();

        model.sql.select.offset(newOffset);

        ResultSet rs = model.sql.select.execute();

        model.save(rs);

        model.sql.getConnection().close(rs);

        updateTable();
    } //GEN-LAST:event_nextPaginationButtonActionPerformed

    private void paginationComboBoxItemStateChanged(java.awt.event.ItemEvent evt) { //GEN-FIRST:event_paginationComboBoxItemStateChanged

        if (evt.getStateChange() == ItemEvent.DESELECTED &&
            pagination.GUIComponent.getComboBoxStatus() ==
                PaginationGUIComponent.COMBOBOX_ACCEPT_ANY_ACTION)
        {
            System.out.println("Posisi " + "paginationComboBox");

            int selectedPage = Integer.valueOf(paginationComboBox
                .getSelectedItem())

```

```

        .toString());

        int newOffset = pagination.jumpTo(selectedPage);
        pagination.GUIComponent.update();

        model.sql.select.offset(newOffset);
        ResultSet rs = model.sql.select.execute();
        model.save(rs);
        model.sql.getConnection().close(rs);

        updateTable();

        resetDataDetail();
    }
} //GEN-LAST:event_paginationComboBoxItemStateChanged

private void previousPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_previousPaginationButtonActionPerformed
    int newOffset = pagination.movePrevious();
    pagination.GUIComponent.update();

    model.sql.select.offset(newOffset);
    ResultSet rs = model.sql.select.execute();
    model.save(rs);
    model.sql.getConnection().close(rs);

    updateTable();
} //GEN-LAST:event_previousPaginationButtonActionPerformed

private void firstPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_firstPaginationButtonActionPerformed
    int newOffset = pagination.jumpToFirst();

```



```

        pagination.GUIComponent.update();

        model.sql.select.offset(newOffset);
        ResultSet rs = model.sql.select.execute();
        model.save(rs);
        model.sql.getConnection().close(rs);

        updateTable();
    } //GEN-LAST:event_firstPaginationButtonActionPerformed

    private void ubahButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_ubahButtonActionPerformed
        // TODO add your handling code here:

        int row = viewTable.getSelectedRow();
        String noKTP = model.getValueAt(row, 0).toString();

        javax.swing.JPanel en = new belajardatabase.pelanggan.Edit(frame, noKTP);

        frame.setContentPane(en);
        SwingUtilities.updateComponentTreeUI(frame.getContentPane());
    } //GEN-LAST:event_ubahButtonActionPerformed

    private void hapusButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_hapusButtonActionPerformed
        // TODO add your handling code here:

        int row = viewTable.getSelectedRow();
        String nama = model.getValueAt(row, 1).toString();
        String noKTP = model.getValueAt(row, 0).toString();

        int response = JOptionPane.showConfirmDialog(frame,
            "Apakah anda ingin menghapus pelanggan (" + nama + ") ini?",
            "Penghapusan Data",

```

```

        JOptionPane.YES_NO_OPTION,
        JOptionPane.WARNING_MESSAGE
    );

    if (response == JOptionPane.YES_OPTION) {
        Delete.delete(noKTP, frame); // lakukan penghapusan

        // update table and pagination
        int newOffset = pagination.updatePagination();
        pagination.GUIComponent.reinitComboBox();
        pagination.GUIComponent.update();

        model.sql.select.offset(newOffset);
        ResultSet rs = model.sql.select.execute();
        model.save(rs);
        model.sql.getConnection().close(rs);
        updateTable();
    }
} //GEN-LAST:event_hapusButtonActionPerformed

public void updateTable() {
    model.fireTableDataChanged();
}

public void resetDataDetail() {
    noKTPField.setText("Pilih baris data");
    namaField.setText("Pilih baris data");
    jenisKelaminField.setText("Pilih baris data");
    tanggalLahirField.setText("Pilih baris data");
    pekerjaanField.setText("Pilih baris data");
    alamatField.setText("Pilih baris data");
}

```

```

        kotaField.setText("Pilih baris data");
        teleponField.setText("Pilih baris data");
        noHPField.setText("Pilih baris data");
        emailField.setText("Pilih baris data");
        ubahButton.setEnabled(false);
        hapusButton.setEnabled(false);
    }

```

```

// Variables declaration - do not modify//GEN-BEGIN:variables

```

```

private javax.swing.JTextField alamatField;
private javax.swing.JPanel dataDetailPanel;
private javax.swing.JTextField emailField;
private javax.swing.JButton firstPaginationButton;
private javax.swing.JButton hapusButton;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel18;
private javax.swing.JLabel jLabel19;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel20;
private javax.swing.JLabel jLabel21;
private javax.swing.JLabel jLabel22;
private javax.swing.JLabel jLabel8;
private javax.swing.JPanel jPanel10;
private javax.swing.JPanel jPanel11;
private javax.swing.JPanel jPanel12;
private javax.swing.JPanel jPanel13;
private javax.swing.JPanel jPanel14;
private javax.swing.JPanel jPanel15;

```

```

private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel8;
private javax.swing.JPanel jPanel9;
private javax.swing.JTextField jenisKelaminField;
private javax.swing.JTextField kotaField;
private javax.swing.JButton lastPaginationButton;
private javax.swing.JTextField namaField;
private javax.swing.JButton nextPaginationButton;
private javax.swing.JTextField noHPField;
private javax.swing.JTextField noKTPField;
private javax.swing.JComboBox paginationComboBox;
private javax.swing.JTextField pekerjaanField;
private javax.swing.JTextField pencarianField;
private javax.swing.JLabel positionPaginationLabel;
private javax.swing.JButton previousPaginationButton;
private javax.swing.JTextField tanggalLahirField;
private javax.swing.JTextField teleponField;
private javax.swing.JButton ubahButton;
private javax.swing.JScrollPane viewScrollPane;
private javax.swing.JTable viewTable;

// End of variables declaration//GEN-END:variables
}

./pelanggan/Edit.java

/*
 * 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 belajardatabase.pelanggan;

import belajardatabase.model.KotaTableModel;
import belajardatabase.model.MobilTableModel;
import belajardatabase.model.PelangganTableModel;
import static belajardatabase.utilities.DateUtility.getDayFromDateString;
import static belajardatabase.utilities.DateUtility.getMonthFromDateString;
import static belajardatabase.utilities.DateUtility.getYearFromDateString;
import java.sql.ResultSet;
import javax.swing.JOptionPane;
import javax.swing.SwingUtilities;

/**
 *
 * @author ASEP
 */
public class Edit extends javax.swing.JPanel {

    PelangganTableModel model = null;
    KotaTableModel kotaModel = null;

    javax.swing.JFrame frame = null;
    private String noKTP = "";

    /**
     * Creates new form entry
     */
    public Edit(javax.swing.JFrame frame, String noKTP) {
        this.frame = frame;
        this.noKTP = noKTP;

        initComponents();
    }

```

```

try {
    initModel();
} catch (Exception e) {
    System.out.println("Error inside `initModel` : " + e.getMessage());
}

initForm();

// init kota combobox
ResultSet rs = kotaModel.sql.select.execute();
kotaModel.save(rs);
kotaModel.sql.getConnection().close(rs);
for (int i = 0; i < kotaModel.getRowCount(); i++)
    kotaComboBox.addItem(kotaModel.getValueAt(i, 1).toString());

// listen when mainWindow is closed
frame.addWindowListener(new java.awt.event.WindowAdapter() {
    @Override
    public void windowClosing(java.awt.event.WindowEvent windowEvent) {
        model.sql.closeDBConnection();
        kotaModel.sql.closeDBConnection();
    }
});
}

public void initModel() throws Exception {
    model = new PelangganTableModel();
    kotaModel = new KotaTableModel();

    model.sql.select.where("noKTP", "=", noKTP);

```

```

ResultSet rs = model.sql.select.execute();

model.save(rs);

model.sql.getConnection().close(rs);

if (model.getRowCount() != 1) {
    throw new Exception("Pelanggan tidak ditemukan");
}
}

public void initForm() {
    String noKTP = model.getValueAt(0, 0).toString();
    String nama = model.getValueAt(0, 1).toString();
    String tanggalLahir = model.getValueAt(0, 2).toString();
    String pekerjaan = model.getValueAt(0, 3).toString();
    String alamat = model.getValueAt(0, 4).toString();
    String jenisKelamin = model.getValueAt(0, 5).toString();
    String idKota = model.getValueAt(0, 6).toString();
    String telepon = model.getValueAt(0, 7).toString();
    String handphone = model.getValueAt(0, 8).toString();
    String email = model.getValueAt(0, 9).toString();

    String tglLahirHari = getDayFromDateString(tanggalLahir, "dd-MM-yyyy");
    String tglLahirBulan = getMonthFromDateString(tanggalLahir, "dd-MM-yyyy");
    String tglLahirTahun = getYearFromDateString(tanggalLahir, "dd-MM-yyyy");

    int jenkel = Integer.valueOf(jenisKelamin);
    KotaTableModel kotaModel = new KotaTableModel();
    String namaKota = kotaModel.getNamaKotaById(
        Integer.valueOf(idKota)
    );
};

```

```

noKTPField.setText(noKTP);
namaField.setText(nama);

priaRadioButton.setSelected(false);
wanitaRadioButton.setSelected(true);
if (jenkel == PelangganTableModel.PRIA) {
    priaRadioButton.setSelected(true);
    wanitaRadioButton.setSelected(false);
}

tahunField.setText(tglLahirTahun);
bulanField.setText(tglLahirBulan);
hariField.setText(tglLahirHari);
pekerjaanField.setText(pekerjaan);
alamatField.setText(alamat);
kotaComboBox.setSelectedItem(namaKota);
teleponField.setText(telepon);
noHPField.setText(handphone);
emailField.setText(email);
}

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jPanel2 = new javax.swing.JPanel();

```



```

jLabel1 = new javax.swing.JLabel();
noKTPField = new javax.swing.JTextField();
jLabel2 = new javax.swing.JLabel();
namaField = new javax.swing.JTextField();
jLabel3 = new javax.swing.JLabel();
jPanel1 = new javax.swing.JPanel();
priaRadioButton = new javax.swing.JRadioButton();
wanitaRadioButton = new javax.swing.JRadioButton();
jLabel4 = new javax.swing.JLabel();
jPanel3 = new javax.swing.JPanel();
hariField = new javax.swing.JTextField();
bulanField = new javax.swing.JTextField();
tahunField = new javax.swing.JTextField();
jLabel5 = new javax.swing.JLabel();
pekerjaanField = new javax.swing.JTextField();
jLabel6 = new javax.swing.JLabel();
alamatField = new javax.swing.JTextField();
jLabel7 = new javax.swing.JLabel();
kotaComboBox = new javax.swing.JComboBox<String>();
jLabel8 = new javax.swing.JLabel();
teleponField = new javax.swing.JTextField();
jLabel9 = new javax.swing.JLabel();
noHPField = new javax.swing.JTextField();
jLabel10 = new javax.swing.JLabel();
emailField = new javax.swing.JTextField();
jPanel4 = new javax.swing.JPanel();
jPanel5 = new javax.swing.JPanel();
simpanButton = new javax.swing.JButton();

setMaximumSize(new java.awt.Dimension(626, 666));
setMinimumSize(new java.awt.Dimension(626, 666));

```

```
setPreferredSize(new java.awt.Dimension(626, 666));
```

```
jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Form Tambah  
Pelanggan", javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,  
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Tahoma", 0, 11), new  
java.awt.Color(51, 51, 51))); // NOI18N
```

```
jPanel2.setForeground(new java.awt.Color(51, 51, 51));
```

```
jPanel2.setPreferredSize(new java.awt.Dimension(388, 300));
```

```
jPanel2.setLayout(new java.awt.GridLayout(11, 2, 0, 10));
```

```
jLabel1.setText("No. KTP");
```

```
jPanel2.add(jLabel1);
```

```
noKTPField.setEditable(false);
```

```
noKTPField.setName("no_ktp"); // NOI18N
```

```
jPanel2.add(noKTPField);
```

```
jLabel2.setText("Nama");
```

```
jPanel2.add(jLabel2);
```

```
namaField.setName("nama"); // NOI18N
```

```
jPanel2.add(namaField);
```

```
jLabel3.setText("Jenis Kelamin");
```

```
jPanel2.add(jLabel3);
```

```
jPanel1.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
priaRadioButton.setSelected(true);
```

```
priaRadioButton.setText("L");
```

```
priaRadioButton.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```

        priaRadioButtonActionPerformed(evt);
    }
});
jPanel1.add(priaRadioButton);

wanitaRadioButton.setText("P");
wanitaRadioButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        wanitaRadioButtonActionPerformed(evt);
    }
});
jPanel1.add(wanitaRadioButton);

jPanel2.add(jPanel1);

jLabel4.setText("Tanggal Lahir");
jPanel2.add(jLabel4);

jPanel3.setLayout(new java.awt.GridLayout(1, 3, 10, 0));

hariField.setText("HH");
jPanel3.add(hariField);

bulanField.setText("MM");
jPanel3.add(bulanField);

tahunField.setText("TTTT");
jPanel3.add(tahunField);

jPanel2.add(jPanel3);

```

```
jLabel5.setText("Pekerjaan");
```

```
jPanel2.add(jLabel5);
```

```
pekerjaanField.setName("pekerjaan"); // NOI18N
```

```
jPanel2.add(pekerjaanField);
```

```
jLabel6.setText("Alamat");
```

```
jPanel2.add(jLabel6);
```

```
alamatField.setName("alamat"); // NOI18N
```

```
jPanel2.add(alamatField);
```

```
jLabel7.setText("Kota");
```

```
jPanel2.add(jLabel7);
```

```
kotaComboBox.setName("kotaComboBox"); // NOI18N
```

```
kotaComboBox.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        kotaComboBoxActionPerformed(evt);
```

```
    }
```

```
});
```

```
jPanel2.add(kotaComboBox);
```

```
jLabel8.setText("Telepon");
```

```
jPanel2.add(jLabel8);
```

```
teleponField.setName("telepon"); // NOI18N
```

```
jPanel2.add(teleponField);
```

```
jLabel9.setText("No. HP");
```

```
jPanel2.add(jLabel9);
```

```
noHPField.setName("no_hp"); // NOI18N
```

```
jPanel2.add(noHPField);
```

```
jLabel10.setText("Email");
```

```
jPanel2.add(jLabel10);
```

```
emailField.setName("email"); // NOI18N
```

```
jPanel2.add(emailField);
```

```
javax.swing.GroupLayout jPanel4Layout = new javax.swing.GroupLayout(jPanel4);
```

```
jPanel4.setLayout(jPanel4Layout);
```

```
jPanel4Layout.setHorizontalGroup(
```

```
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addGap(0, 170, Short.MAX_VALUE)
```

```
);
```

```
jPanel4Layout.setVerticalGroup(
```

```
    jPanel4Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
        .addGap(0, 26, Short.MAX_VALUE)
```

```
);
```

```
jPanel2.add(jPanel4);
```

```
jPanel5.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
simpanButton.setText("UBAH");
```

```
simpanButton.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        simpanButtonActionPerformed(evt);
```

```
    }
```

```
});
```

```

jPanel5.add(simpanButton);

jPanel2.add(jPanel5);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap()
            .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 352,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(264, Short.MAX_VALUE))
        );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap()
            .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 416,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(239, Short.MAX_VALUE))
        );
} // </editor-fold> // GEN-END: initComponents

private void kotaComboBoxActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_kotaComboBoxActionPerformed
    // TODO add your handling code here:
} // GEN-LAST:event_kotaComboBoxActionPerformed

private void simpanButtonActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_simpanButtonActionPerformed

```

```

int jenkel = PelangganTableModel.PEREMPUAN;
if (priaRadioButton.isSelected()) jenkel = PelangganTableModel.PRIA;

String tanggalLahir = tahunField.getText() + "-" + bulanField.getText()
    + "-" + hariField.getText();

String namaKota = kotaComboBox.getSelectedItem().toString();
int idKota = kotaModel.getIdKotaByNamaKota(namaKota);

model.sql.update.reset();
model.sql.update.where("noKTP", noKTP);
model.sql.update.set("nama", namaField.getText());
model.sql.update.set("jenisKelamin", jenkel);
model.sql.update.set("tanggalLahir", tanggalLahir);
model.sql.update.set("pekerjaan", pekerjaanField.getText());
model.sql.update.set("alamat", alamatField.getText());
model.sql.update.set("idKota", idKota);
model.sql.update.set("telepon", teleponField.getText());
model.sql.update.set("handphone", noHPField.getText());
model.sql.update.set("email", emailField.getText());

boolean success = model.sql.update.execute();

String pesan = "Gagal mengubah data";
if (success) pesan = "Sukses mengubah data";
JOptionPane.showMessageDialog(frame, pesan);

if (success) redirectToView();
} //GEN-LAST:event_simpanButtonActionPerformed

```

```

    private void priaRadioButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_priaRadioButtonActionPerformed
        wanitaRadioButton.setSelected(false);
    } //GEN-LAST:event_priaRadioButtonActionPerformed

    private void wanitaRadioButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_wanitaRadioButtonActionPerformed
        priaRadioButton.setSelected(false);
    } //GEN-LAST:event_wanitaRadioButtonActionPerformed

    public void redirectToView() {
        javax.swing.JPanel en = new belajardatabase.pelanggan.View(frame);

        frame.setContentPane(en);
        SwingUtilities.updateComponentTreeUI(frame.getContentPane());
    }

    // Variables declaration - do not modify //GEN-BEGIN:variables
    private javax.swing.JTextField alamatField;
    private javax.swing.JTextField bulanField;
    private javax.swing.JTextField emailField;
    private javax.swing.JTextField hariField;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel10;
    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 jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel5;
private javax.swing.JComboBox<String> kotaComboBox;
private javax.swing.JTextField namaField;
private javax.swing.JTextField noHPField;
private javax.swing.JTextField noKTPField;
private javax.swing.JTextField pekerjaanField;
private javax.swing.JRadioButton priaRadioButton;
private javax.swing.JButton simpanButton;
private javax.swing.JTextField tahunField;
private javax.swing.JTextField teleponField;
private javax.swing.JRadioButton wanitaRadioButton;
// End of variables declaration//GEN-END:variables

}

./mobil/Entry.java
/*
 * 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 belajardatabase.mobil;

import belajardatabase.model.MobilTableModel;
import belajardatabase.mysqllop.InsertSQL;
import java.sql.ResultSet;

```

```

import java.sql.SQLException;

import javax.swing.JOptionPane;


/**
 *
 * @author ASEP
 */
public class Entry extends javax.swing.JPanel {

    MobilTableModel    model  = null;

    javax.swing.JFrame frame  = null;

    //InputValidator validator  = null;


    /**
     * Creates new form entry
     */
    public Entry(javax.swing.JFrame frame) {

        initComponents();

        initModel();


        // listen when mainWindow is closed
        frame.addWindowListener(new java.awt.event.WindowAdapter() {

            @Override

            public void windowClosing(java.awt.event.WindowEvent windowEvent) {

                model.sql.closeDBConnection();

            }

        });

    }


    public void initModel() {

        model = new MobilTableModel();

    }

```

```

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN: initComponents
private void initComponents() {

    fieldPanel = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    noPolisiField = new javax.swing.JTextField();
    jLabel2 = new javax.swing.JLabel();
    merkField = new javax.swing.JTextField();
    jLabel3 = new javax.swing.JLabel();
    warnaField = new javax.swing.JTextField();
    jLabel4 = new javax.swing.JLabel();
    tahunField = new javax.swing.JTextField();
    jLabel5 = new javax.swing.JLabel();
    hargaSewa12JamField = new javax.swing.JTextField();
    jLabel6 = new javax.swing.JLabel();
    hargaSewa24JamField = new javax.swing.JTextField();
    jLabel7 = new javax.swing.JLabel();
    dendaPerJamField = new javax.swing.JTextField();
    jLabel8 = new javax.swing.JLabel();
    statusComboBox = new javax.swing.JComboBox();
    jLabel9 = new javax.swing.JLabel();
    simpanButton = new javax.swing.JButton();
    jLabel10 = new javax.swing.JLabel();
    jScrollPane2 = new javax.swing.JScrollPane();

```

```

messageTextPane = new javax.swing.JTextPane();

setMaximumSize(new java.awt.Dimension(626, 666));
setMinimumSize(new java.awt.Dimension(626, 666));
setPreferredSize(new java.awt.Dimension(626, 666));

fieldPanel.setLayout(new java.awt.GridLayout(9, 2, 10, 5));

jLabel1.setText("No. Polisi (9 karakter maksimal)");
fieldPanel.add(jLabel1);
fieldPanel.add(noPolisiField);

jLabel2.setText("Merk");
fieldPanel.add(jLabel2);
fieldPanel.add(merkField);

jLabel3.setText("Warna");
fieldPanel.add(jLabel3);
fieldPanel.add(warnaField);

jLabel4.setText("Tahun");
fieldPanel.add(jLabel4);
fieldPanel.add(tahunField);

jLabel5.setText("Harga Sewa 12 Jam");
jLabel5.setToolTipText("");
fieldPanel.add(jLabel5);

hargaSewa12JamField.setEditable(false);
hargaSewa12JamField.setText("Tidak Tersedia");
fieldPanel.add(hargaSewa12JamField);

```

```

jLabel6.setText("Harga Sewa 24 Jam");
fieldPanel.add(jLabel6);
fieldPanel.add(hargaSewa24JamField);

jLabel7.setText("Denda Per Hari");
fieldPanel.add(jLabel7);
fieldPanel.add(dendaPerJamField);

jLabel8.setText("Status");
fieldPanel.add(jLabel8);

statusComboBox.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "Tersedia",
"Tidak Tersedia" }));
fieldPanel.add(statusComboBox);

jLabel9.setText("just a gap holder");
fieldPanel.add(jLabel9);

simpanButton.setText("SIMPAN");
simpanButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        simpanButtonActionPerformed(evt);
    }
});
fieldPanel.add(simpanButton);

jLabel10.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel10.setText("Tambah Mobil");

messageTextPane.setEditable(false);

```

```

jScrollPane2.setViewportView(messageTextPane);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(20, 20, 20)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(jLabel10)
                .addComponent(fieldPanel, javax.swing.GroupLayout.DEFAULT_SIZE, 357,
Short.MAX_VALUE)
                .addComponent(jScrollPane2))
            .addGap(249, 249, Short.MAX_VALUE))
        );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(26, 26, 26)
            .addComponent(jLabel10)
            .addGap(31, 31, 31)
            .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 56,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(8, 8, 8)
            .addComponent(fieldPanel, javax.swing.GroupLayout.PREFERRED_SIZE, 296,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(227, 227, Short.MAX_VALUE))
        );
} // </editor-fold> // GEN-END: initComponents

private void simpanButtonActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_simpanButtonActionPerformed

```

```

model.sql.insert.reset();

model.sql.insert.value("noPolisi", noPolisiField.getText());

model.sql.insert.value("merk", merkField.getText());

model.sql.insert.value("warna", warnaField.getText());

model.sql.insert.value(
    "tahun",
    Integer.valueOf(tahunField.getText())
);

model.sql.insert.value("hargaSewa12Jam", 0);

model.sql.insert.value(
    "hargaSewa24Jam",
    Integer.valueOf(hargaSewa24JamField.getText())
);

model.sql.insert.value(
    "dendaPerJam",
    Integer.valueOf(dendaPerJamField.getText())
);

model.sql.insert.value("status", statusComboBox
    .getSelectedItem().toString() == "Tersedia" ?
    MobilTableModel.STATUS_TERSEDIA :
    MobilTableModel.STATUS_TIDAK_TERSEDIA
);

boolean success = model.sql.insert.execute();

String pesan = "Gagal menambah data";
if (success) pesan = "Sukses menambah data";

JOptionPane.showMessageDialog(frame, pesan);
reset();

```

```
//GEN-LAST:event_simpanButtonActionPerformed
```

```
public void reset() {  
    noPolisiField.setText("");  
    merkField.setText("");  
    warnaField.setText("");  
    tahunField.setText("");  
    hargaSewa24JamField.setText("");  
    dendaPerJamField.setText("");  
    statusComboBox.setSelectedIndex(0);  
}
```

```
// Variables declaration - do not modify//GEN-BEGIN:variables
```

```
private javax.swing.JTextField dendaPerJamField;  
private javax.swing.JPanel fieldPanel;  
private javax.swing.JTextField hargaSewa12JamField;  
private javax.swing.JTextField hargaSewa24JamField;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel10;  
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.JTextField merkField;  
private javax.swing.JTextPane messageTextPane;  
private javax.swing.JTextField noPolisiField;
```



```

private javax.swing.JButton simpanButton;

private javax.swing.JComboBox statusComboBox;

private javax.swing.JTextField tahunField;

private javax.swing.JTextField warnaField;

// End of variables declaration//GEN-END:variables
}

./mobil/Delete.java

/*
 * 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 belajardatabase.mobil;

import belajardatabase.model.MobilTableModel;
import belajardatabase.model.PenyewaanTableModel;
import java.sql.ResultSet;
import javax.swing.JOptionPane;

/**
 *
 * @author ASEP
 */
public class Delete {

    public static void delete(String noPolisi, javax.swing.JFrame frame) {

        MobilTableModel model = new MobilTableModel();

        if (penyewaanRelatedToNoPolisi(noPolisi) > 0) {

            JOptionPane.showMessageDialog(

```

```

        frame,

        "Tidak bisa menghapus mobil yang pernah/sedang disewakan"
        + "\nKecuali semua riwayat sewa berkaitan dengan No. Polisi ini dihapus"
    );
} else {
    model.sql.delete.where("noPolisi", noPolisi);
    boolean success = model.sql.delete.execute();
    String pesan = "Penghapusan gagal";

    if (success) pesan = "Penghapusan berhasil";

    JOptionPane.showMessageDialog(frame, pesan);
}
}

```

```

public static int penyewaanRelatedToNoPolisi(String noPolisi) {
    PenyewaanTableModel model = new PenyewaanTableModel();

    model.sql.select.where("noPolisi", "=", noPolisi);
    ResultSet rs = model.sql.select.execute();
    model.save(rs);
    model.sql.getConnection().close(rs);

    return model.getRowCount();
}
}

```

./mobil/View.java

/*

* 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 belajardatabase.mobil;

import belajardatabase.model.MobilTableModel;
import belajardatabase.utilities.Pagination;
import belajardatabase.utilities.PaginationGUIComponent;
import java.awt.event.ItemEvent;
import java.sql.ResultSet;
import javax.swing.JOptionPane;
import javax.swing.SwingUtilities;
import javax.swing.table.TableColumn;

/**
 *
 * @author ASEP
 */
public class View extends javax.swing.JPanel {

    MobilTableModel model = null;
    Pagination pagination = null;

    private javax.swing.JFrame frame = null;

    /**
     * Creates new form view
     */
    public View(javax.swing.JFrame frame) {
        this.frame = frame;

        initComponents();
        initModel();
    }

```

```

initPagination();

initTable();


// listen when mainWindow is closed
frame.addWindowListener(new java.awt.event.WindowAdapter() {

    @Override

    public void windowClosing(java.awt.event.WindowEvent windowEvent) {

        model.sql.closeDBConnection();

    }

});

}

public void initModel() {

    model = new MobilTableModel();


    String sign = "USER OPTION";


    model.sql.select.whereSegmentStart(sign);
    model.sql.select.where("hargaSewa12Jam", ">=", 0);
    model.sql.select.andWhere("hargaSewa24Jam", ">=", 0);
    model.sql.select.andWhere("status", "=", MobilTableModel.STATUS_TERSEDIA);
    model.sql.select.whereSegmentEnd(sign);


    model.sql.select.limit(model.dataPerPage);
    model.sql.select.offset(0);


    ResultSet rs = model.sql.select.execute();
    model.save(rs);
    model.sql.getConnection().close(rs);

}

```

```

public void initPagination() {
    pagination = new Pagination();
    pagination.setModel(model);
    pagination.setPageLength(model.dataPerPage);
    pagination.GUIComponent.setLabel(positionPaginationLabel);
    pagination.GUIComponent.setComboBox(paginationComboBox);
    pagination.init();
}

```

```

public void initTable() {
    viewTable.setModel(model);

    // leave only 4 column in table
    for (int i = 4; i < 8; i++) {
        TableColumn col = viewTable.getColumnModel().getColumn(4);
        viewTable.getColumnModel().removeColumn(col);
    }

    updateTable();
}

```

```

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN: initComponents
private void initComponents() {

```

```

opsiPanel = new javax.swing.JPanel();
tableOptionPane = new javax.swing.JPanel();
jPanel5 = new javax.swing.JPanel();
jLabel4 = new javax.swing.JLabel();
option_sewa12JamComboBox = new javax.swing.JComboBox();
option_sewa12JamField = new javax.swing.JTextField();
jPanel6 = new javax.swing.JPanel();
jLabel5 = new javax.swing.JLabel();
option_sewa24JamComboBox = new javax.swing.JComboBox();
option_sewa24JamField = new javax.swing.JTextField();
jPanel7 = new javax.swing.JPanel();
jLabel6 = new javax.swing.JLabel();
option_statusComboBox = new javax.swing.JComboBox();
emptyComboBox = new javax.swing.JComboBox();
resetButton = new javax.swing.JButton();
TerapkanButton = new javax.swing.JButton();
pencarianField = new javax.swing.JTextField();
jLabel2 = new javax.swing.JLabel();
viewScrollPane = new javax.swing.JScrollPane();
viewTable = new javax.swing.JTable();
lastPaginationButton = new javax.swing.JButton();
nextPaginationButton = new javax.swing.JButton();
paginationComboBox = new javax.swing.JComboBox();
previousPaginationButton = new javax.swing.JButton();
firstPaginationButton = new javax.swing.JButton();
positionPaginationLabel = new javax.swing.JLabel();
dataDetailPanel = new javax.swing.JPanel();
jPanel4 = new javax.swing.JPanel();
jLabel8 = new javax.swing.JLabel();
noPolisiField = new javax.swing.JTextField();

```

```

jPanel3 = new javax.swing.JPanel();
jLabel9 = new javax.swing.JLabel();
hargaSewa12JamField = new javax.swing.JTextField();
jPanel2 = new javax.swing.JPanel();
jLabel10 = new javax.swing.JLabel();
merkField = new javax.swing.JTextField();
jPanel11 = new javax.swing.JPanel();
jLabel11 = new javax.swing.JLabel();
hargaSewa24JamField = new javax.swing.JTextField();
jPanel8 = new javax.swing.JPanel();
jLabel12 = new javax.swing.JLabel();
warnaField = new javax.swing.JTextField();
jPanel9 = new javax.swing.JPanel();
jLabel13 = new javax.swing.JLabel();
dendaPerJamField = new javax.swing.JTextField();
jPanel10 = new javax.swing.JPanel();
jLabel14 = new javax.swing.JLabel();
tahunField = new javax.swing.JTextField();
jPanel12 = new javax.swing.JPanel();
jLabel15 = new javax.swing.JLabel();
statusField = new javax.swing.JTextField();
jPanel13 = new javax.swing.JPanel();
ubahButton = new javax.swing.JButton();
hapusButton = new javax.swing.JButton();

setMaximumSize(new java.awt.Dimension(626, 666));
setMinimumSize(new java.awt.Dimension(626, 666));
setName(""); // NOI18N
setPreferredSize(new java.awt.Dimension(626, 666));

opsiPanel.setBorder(javax.swing.BorderFactory.createTitledBorder("Ops"));

```

```

tableOptionPane.setLayout(new java.awt.GridLayout(3, 1, 0, 10));

jPanel5.setLayout(new java.awt.GridLayout(1, 3, 15, 0));

jLabel4.setText("Harga Sewa 12 Jam");
jPanel5.add(jLabel4);

option_sewa12JamComboBox.setModel(new javax.swing.DefaultComboBoxModel(new String[]
{ ">=", "<=", ">", "<" }));
jPanel5.add(option_sewa12JamComboBox);

option_sewa12JamField.setEditable(false);
option_sewa12JamField.setText("0");
jPanel5.add(option_sewa12JamField);

tableOptionPane.add(jPanel5);

jPanel6.setLayout(new java.awt.GridLayout(1, 3, 15, 0));

jLabel5.setText("Harga Sewa 24 Jam");
jPanel6.add(jLabel5);

option_sewa24JamComboBox.setModel(new javax.swing.DefaultComboBoxModel(new String[]
{ ">=", "<=", ">", "<" }));
jPanel6.add(option_sewa24JamComboBox);

option_sewa24JamField.setText("0");
jPanel6.add(option_sewa24JamField);

tableOptionPane.add(jPanel6);

```



```

jPanel7.setLayout(new java.awt.GridLayout(1, 3, 15, 0));

jLabel6.setText("Status");
jPanel7.add(jLabel6);

option_statusComboBox.setModel(new javax.swing.DefaultComboBoxModel(new String[] {
"Tersedia", "Tidak Tersedia" }));
jPanel7.add(option_statusComboBox);

emptyComboBox.setVisible(false);
emptyComboBox.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "Item 1",
"Item 2", "Item 3", "Item 4" }));
jPanel7.add(emptyComboBox);

tableOptionPane.add(jPanel7);

resetButton.setText("Reset");
resetButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        resetButtonActionPerformed(evt);
    }
});

TerapkanButton.setText("Terapkan");
TerapkanButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        TerapkanButtonActionPerformed(evt);
    }
});

javax.swing.GroupLayout opsiPanelLayout = new javax.swing.GroupLayout(opsiPanel);
opsiPanel.setLayout(opsiPanelLayout);

```

```

opsiPanelLayout.setHorizontalGroup(
    opsiPanelLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(opsiPanelLayout.createSequentialGroup()
            .addContainerGap()
            .addComponent(resetButton, javax.swing.GroupLayout.PREFERRED_SIZE, 139,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(TerapkanButton, javax.swing.GroupLayout.PREFERRED_SIZE, 139,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
            opsiPanelLayout.createSequentialGroup()
                .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addComponent(tableOptionPane, javax.swing.GroupLayout.PREFERRED_SIZE, 364,
                    javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(224, 224, 224))
    );

opsiPanelLayout.setVerticalGroup(
    opsiPanelLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(opsiPanelLayout.createSequentialGroup()
            .addContainerGap()
            .addComponent(tableOptionPane, javax.swing.GroupLayout.PREFERRED_SIZE, 93,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 12,
                Short.MAX_VALUE)
        .addGroup(opsiPanelLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(resetButton)
            .addComponent(TerapkanButton, javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))
    );

pencarianField.setToolTipText("Kotak Pencarian");

```

```
pencarianField.setBorder(javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFactory.createBevelBorder(javax.swing.border.BevelBorder.LOWERED, java.awt.Color.white, java.awt.Color.white, java.awt.Color.white, java.awt.Color.lightGray), javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFactory.createEmptyBorder(0, 5, 0, 5), javax.swing.BorderFactory.createMatteBorder(0, 0, 0, 16, new javax.swing.ImageIcon("C:\\Users\\ASEP\\Downloads\\1498141047_icon-111-search.png"))))); // NOI18N
```

```
pencarianField.setMargin(new java.awt.Insets(0, 0, 0, 0));

pencarianField.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        pencarianFieldActionPerformed(evt);

    }

});
```

```
jLabel2.setText("Pencarian :");
```

```
viewTable.setAutoResizeMode(javax.swing.JTable.AUTO_RESIZE_ALL_COLUMNS);

viewTable.addMouseListener(new java.awt.event.MouseAdapter() {

    public void mouseClicked(java.awt.event.MouseEvent evt) {

        viewTableMouseClicked(evt);

    }

});
```

```
viewScrollPane.setViewportView(viewTable);
```

```
lastPaginationButton.setText(">>");

lastPaginationButton.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        lastPaginationButtonActionPerformed(evt);

    }

});
```

```
nextPaginationButton.setText(">");
```

```

nextPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        nextPaginationButtonActionPerformed(evt);
    }
});

```

```

paginationComboBox.addItemListener(new java.awt.event.ItemListener() {
    public void itemStateChanged(java.awt.event.ItemEvent evt) {
        paginationComboBoxItemStateChanged(evt);
    }
});

```

```

previousPaginationButton.setText("<");
previousPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        previousPaginationButtonActionPerformed(evt);
    }
});

```

```

firstPaginationButton.setText("<<");
firstPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        firstPaginationButtonActionPerformed(evt);
    }
});

```

```

positionPaginationLabel.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
positionPaginationLabel.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
positionPaginationLabel.setText("Halaman 1 dari 200");
positionPaginationLabel.setAlignmentX(0.5F);

```

```
dataDetailPanel.setBorder(javax.swing.BorderFactory.createTitledBorder("Informasi secara Detail"));
```

```
dataDetailPanel.setLayout(new java.awt.GridLayout(5, 2, 40, 10));
```

```
jPanel4.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel8.setText("No. Polisi");
```

```
jPanel4.add(jLabel8);
```

```
noPolisiField.setEditable(false);
```

```
noPolisiField.setText("Pilih baris data");
```

```
jPanel4.add(noPolisiField);
```

```
dataDetailPanel.add(jPanel4);
```

```
jPanel3.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel9.setText("Harga Sewa 12 Jam");
```

```
jPanel3.add(jLabel9);
```

```
hargaSewa12JamField.setEditable(false);
```

```
hargaSewa12JamField.setText("Pilih baris data");
```

```
jPanel3.add(hargaSewa12JamField);
```

```
dataDetailPanel.add(jPanel3);
```

```
jPanel2.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel10.setText("Merk");
```

```
jPanel2.add(jLabel10);
```

```
merkField.setEditable(false);
merkField.setText("Pilih baris data");
jPanel2.add(merkField);

dataDetailPanel.add(jPanel2);

jPanel11.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel11.setText("Harga Sewa 24 Jam");
jPanel11.add(jLabel11);

hargaSewa24JamField.setEditable(false);
hargaSewa24JamField.setText("Pilih baris data");
jPanel11.add(hargaSewa24JamField);

dataDetailPanel.add(jPanel11);

jPanel8.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel12.setText("Warna");
jPanel8.add(jLabel12);

warnaField.setEditable(false);
warnaField.setText("Pilih baris data");
jPanel8.add(warnaField);

dataDetailPanel.add(jPanel8);

jPanel9.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel13.setText("Denda per Jam");
```

```
jPanel9.add(jLabel13);
```

```
dendaPerJamField.setEditable(false);
```

```
dendaPerJamField.setText("Pilih baris data");
```

```
jPanel9.add(dendaPerJamField);
```

```
dataDetailPanel.add(jPanel9);
```

```
jPanel10.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel14.setText("Tahun");
```

```
jPanel10.add(jLabel14);
```

```
tahunField.setEditable(false);
```

```
tahunField.setText("Pilih baris data");
```

```
jPanel10.add(tahunField);
```

```
dataDetailPanel.add(jPanel10);
```

```
jPanel12.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel15.setText("Status");
```

```
jPanel12.add(jLabel15);
```

```
statusField.setEditable(false);
```

```
statusField.setText("Pilih baris data");
```

```
jPanel12.add(statusField);
```

```
dataDetailPanel.add(jPanel12);
```

```
jPanel13.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```



```

        .addComponent(pencarianField, javax.swing.GroupLayout.PREFERRED_SIZE, 314,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGroup(layout.createSequentialGroup())

        .addComponent(firstPaginationButton)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addComponent(previousPaginationButton)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addComponent(paginationComboBox, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addComponent(nextPaginationButton)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addComponent(lastPaginationButton)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addComponent(positionPaginationLabel, javax.swing.GroupLayout.PREFERRED_SIZE,
169, javax.swing.GroupLayout.PREFERRED_SIZE))

        .addComponent(dataDetailPanel, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(viewScrollPane, javax.swing.GroupLayout.DEFAULT_SIZE, 608,
Short.MAX_VALUE)

        .addComponent(opsiPanel, javax.swing.GroupLayout.PREFERRED_SIZE, 608,
Short.MAX_VALUE))

        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

    );

    layout.setVerticalGroup(

        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(layout.createSequentialGroup())

        .addContainerGap()

        .addComponent(opsiPanel, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(27, 27, 27)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

            .addComponent(jLabel2)

```

```

        .addComponent(pencarianField, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addComponent(viewScrollPane, javax.swing.GroupLayout.PREFERRED_SIZE, 136,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

        .addComponent(previousPaginationButton, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(firstPaginationButton)

        .addComponent(paginationComboBox, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(nextPaginationButton)

        .addComponent(lastPaginationButton)

        .addComponent(positionPaginationLabel, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addComponent(dataDetailPanel, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addContainerGap())

    );

} // </editor-fold> // GEN-END: initComponents

```

```

private void resetButtonActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_resetButtonActionPerformed

    option_sewa12JamComboBox.setSelectedItem(">=");

    option_sewa12JamField.setText("0");

    option_sewa24JamComboBox.setSelectedItem(">=");

    option_sewa24JamField.setText("0");

    option_statusComboBox.setSelectedItem("Tersedia");

    TerapkanButtonActionPerformed(null);

} // GEN-LAST:event_resetButtonActionPerformed

```

```

private void TerapkanButtonActionPerformed(java.awt.event.ActionEvent evt) {GEN-
FIRST:event_TerapkanButtonActionPerformed

    // grab the user option value

    String sewa12JamOperator = option_sewa12JamComboBox
        .getSelectedItem().toString();

    String sewa24JamOperator = option_sewa24JamComboBox
        .getSelectedItem().toString();

    String sewa12Jam = option_sewa12JamField.getText();
    String sewa24Jam = option_sewa24JamField.getText();

    int status = option_statusComboBox.getSelectedItem().toString()
        .equals("Tersedia") ?

    MobilTableModel.STATUS_TERSEDIA :
    MobilTableModel.STATUS_TIDAK_TERSEDIA;;

    // reset

    String sign = "USER OPTION";
    model.sql.select.removeWhereBySegmentSign(sign);

    model.sql.select.whereSegmentStart(sign);
    model.sql.select.where("hargaSewa12Jam", sewa12JamOperator, sewa12Jam);
    model.sql.select.andWhere("hargaSewa24Jam", sewa24JamOperator, sewa24Jam);
    model.sql.select.andWhere("status", "=", status);
    model.sql.select.whereSegmentEnd(sign);

    int newOffset = pagination.isSQLChanged.updatePagination();
    pagination.isSQLChanged.GUIComponent.reinitComboBox();
    pagination.GUIComponent.update();

    model.sql.select.offset(newOffset);
    ResultSet rs = model.sql.select.execute();
    model.save(rs);

```

```

model.sql.getConnection().close(rs);

updateTable();
} //GEN-LAST:event_TerapkanButtonActionPerformed

private void pencarianFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_pencarianFieldActionPerformed
    String searchText = pencarianField.getText();

    // reset where clause
    String sign = "USER SEARCH";
    model.sql.select.removeWhereBySegmentSign(sign);

    model.sql.select.whereSegmentStart(sign);
    model.sql.select.where("noPolisi", "LIKE", "%" + searchText + "%");
    model.sql.select.orWhere("merk", "LIKE", "%" + searchText + "%");
    model.sql.select.whereSegmentEnd(sign);

    int newOffset = pagination.isSQLChanged.updatePagination();
    pagination.isSQLChanged.GUIComponent.reinitComboBox();
    pagination.GUIComponent.update();

    model.sql.select.offset(newOffset);
    ResultSet rs = model.sql.select.execute();
    model.save(rs);
    model.sql.getConnection().close(rs);

    updateTable();
} //GEN-LAST:event_pencarianFieldActionPerformed

private void viewTableMouseClicked(java.awt.event.MouseEvent evt) { //GEN-FIRST:event_viewTableMouseClicked

```

```

int row = viewTable.getSelectedRow();

if (row != -1) {
    String noPolisi = model.getValueAt(row, 0).toString();
    String merk = model.getValueAt(row, 1).toString();
    String warna = model.getValueAt(row, 4).toString();
    String tahun = model.getValueAt(row, 5).toString();
    String hargaSewa12Jam = model.getValueAt(row, 2).toString();
    String hargaSewa24Jam = model.getValueAt(row, 3).toString();
    String dendaPerJam = model.getValueAt(row, 6).toString();
    String status = model.getValueAt(row, 7).toString();

    noPolisiField.setText(noPolisi);
    merkField.setText(merk);
    warnaField.setText(warna);
    tahunField.setText(tahun);
    hargaSewa12JamField.setText(hargaSewa12Jam);
    hargaSewa24JamField.setText(hargaSewa24Jam);
    dendaPerJamField.setText(dendaPerJam);
    statusField.setText(
        Integer.valueOf(status) == MobilTableModel.STATUS_TERSEDIA
        ? "Tersedia" : "Tidak Tersedia"
    );

    ubahButton.setEnabled(true);
    hapusButton.setEnabled(true);
}

} //GEN-LAST:event_viewTableMouseClicked

private void lastPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_lastPaginationButtonActionPerformed

```

```

int newOffset = pagination.jumpToLast();
pagination.GUIComponent.update();

model.sql.select.offset(newOffset);
ResultSet rs = model.sql.select.execute();
model.save(rs);
model.sql.getConnection().close(rs);

updateTable();
} //GEN-LAST:event_lastPaginationButtonActionPerformed

private void nextPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_nextPaginationButtonActionPerformed

    int newOffset = pagination.moveToNext();
    pagination.GUIComponent.update();

    model.sql.select.offset(newOffset);
    ResultSet rs = model.sql.select.execute();
    model.save(rs);
    model.sql.getConnection().close(rs);

    updateTable();
} //GEN-LAST:event_nextPaginationButtonActionPerformed

private void paginationComboBoxItemStateChanged(java.awt.event.ItemEvent evt) { //GEN-FIRST:event_paginationComboBoxItemStateChanged

    if (evt.getStateChange() == ItemEvent.DESELECTED &&
        pagination.GUIComponent.getComboBoxStatus() ==
        PaginationGUIComponent.COMBOBOX_ACCEPT_ANY_ACTION)
    {
        System.out.println("Posisi " + "paginationComboBox");
    }
}

```

```

        int selectedPage = Integer.valueOf(paginationComboBox
            .getSelectedItem()
            .toString());

        int newOffset = pagination.jumpTo(selectedPage);
        pagination.GUIComponent.update();

        model.sql.select.offset(newOffset);
        ResultSet rs = model.sql.select.execute();
        model.save(rs);
        model.sql.getConnection().close(rs);

        updateTable();

        resetDataDetail();
    }
} //GEN-LAST:event_paginationComboBoxItemStateChanged

private void previousPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_previousPaginationButtonActionPerformed

    int newOffset = pagination.movePrevious();
    pagination.GUIComponent.update();

    model.sql.select.offset(newOffset);
    ResultSet rs = model.sql.select.execute();
    model.save(rs);
    model.sql.getConnection().close(rs);

    updateTable();
} //GEN-LAST:event_previousPaginationButtonActionPerformed

```

```
private void firstPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_firstPaginationButtonActionPerformed
```

```
    int newOffset = pagination.jumpToFirst();
```

```
    pagination.GUIComponent.update();
```

```
    model.sql.select.offset(newOffset);
```

```
    ResultSet rs = model.sql.select.execute();
```

```
    model.save(rs);
```

```
    model.sql.getConnection().close(rs);
```

```
    updateTable();
```

```
 //GEN-LAST:event_firstPaginationButtonActionPerformed
```

```
private void hapusButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_hapusButtonActionPerformed
```

```
    int row = viewTable.getSelectedRow();
```

```
    String merk = model.getValueAt(row, 1).toString();
```

```
    String noPolisi = model.getValueAt(row, 0).toString();
```

```
    int response = JOptionPane.showConfirmDialog(frame,
```

```
        "Apakah anda ingin menghapus mobil " + merk + " ini?",
```

```
        "Penghapusan Data",
```

```
        JOptionPane.YES_NO_OPTION,
```

```
        JOptionPane.WARNING_MESSAGE
```

```
    );
```

```
    if (response == JOptionPane.YES_OPTION) {
```

```
        Delete.delete(noPolisi, frame); // lakukan penghapusan
```

```
        // update table and pagination
```

```
        int newOffset = pagination.updatePagination();
```

```
        pagination.GUIComponent.reinitComboBox();
```



```

        pagination.GUIComponent.update();

        model.sql.select.offset(newOffset);
        ResultSet rs = model.sql.select.execute();
        model.save(rs);
        model.sql.getConnection().close(rs);
        updateTable();
    }
}

//GEN-LAST:event_hapusButtonActionPerformed

private void ubahButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_ubahButtonActionPerformed
    int row = viewTable.getSelectedRow();
    String noPolisi = model.getValueAt(row, 0).toString();

    javax.swing.JPanel en = new belajardatabase.mobil.Edit(frame, noPolisi);

    frame.setContentPane(en);
    SwingUtilities.updateComponentTreeUI(frame.getContentPane());
}

//GEN-LAST:event_ubahButtonActionPerformed

public void updateTable() {
    model.fireTableDataChanged();
}

public void resetDataDetail() {
    noPolisiField.setText("Pilih baris data");
    merkField.setText("Pilih baris data");
    warnaField.setText("Pilih baris data");
    tahunField.setText("Pilih baris data");
    hargaSewa12JamField.setText("Pilih baris data");
}

```

```

        hargaSewa24JamField.setText("Pilih baris data");
        dendaPerJamField.setText("Pilih baris data");
        statusField.setText("Pilih baris data");
        ubahButton.setEnabled(false);
        hapusButton.setEnabled(false);
    }

    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JButton TerapkanButton;
    private javax.swing.JPanel dataDetailPanel;
    private javax.swing.JTextField dendaPerJamField;
    private javax.swing.JComboBox emptyComboBox;
    private javax.swing.JButton firstPaginationButton;
    private javax.swing.JButton hapusButton;
    private javax.swing.JTextField hargaSewa12JamField;
    private javax.swing.JTextField hargaSewa24JamField;
    private javax.swing.JLabel jLabel10;
    private javax.swing.JLabel jLabel11;
    private javax.swing.JLabel jLabel12;
    private javax.swing.JLabel jLabel13;
    private javax.swing.JLabel jLabel14;
    private javax.swing.JLabel jLabel15;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel6;
    private javax.swing.JLabel jLabel8;
    private javax.swing.JLabel jLabel9;
    private javax.swing.JPanel jPanel10;
    private javax.swing.JPanel jPanel11;
    private javax.swing.JPanel jPanel12;

```

```

private javax.swing.JPanel jPanel13;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel5;
private javax.swing.JPanel jPanel6;
private javax.swing.JPanel jPanel7;
private javax.swing.JPanel jPanel8;
private javax.swing.JPanel jPanel9;
private javax.swing.JButton lastPaginationButton;
private javax.swing.JTextField merkField;
private javax.swing.JButton nextPaginationButton;
private javax.swing.JTextField noPolisiField;
private javax.swing.JPanel opsiPanel;
private javax.swing.JComboBox option_sewa12JamComboBox;
private javax.swing.JTextField option_sewa12JamField;
private javax.swing.JComboBox option_sewa24JamComboBox;
private javax.swing.JTextField option_sewa24JamField;
private javax.swing.JComboBox option_statusComboBox;
private javax.swing.JComboBox paginationComboBox;
private javax.swing.JTextField pencarianField;
private javax.swing.JLabel positionPaginationLabel;
private javax.swing.JButton previousPaginationButton;
private javax.swing.JButton resetButton;
private javax.swing.JTextField statusField;
private javax.swing.JPanel tableOptionPane;
private javax.swing.JTextField tahunField;
private javax.swing.JButton ubahButton;
private javax.swing.JScrollPane viewScrollPane;
private javax.swing.JTable viewTable;
private javax.swing.JTextField warnaField;

```

```

    // End of variables declaration//GEN-END:variables
}

./mobil/Edit.java

/*
 * 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 belajardatabase.mobil;

import belajardatabase.model.MobilTableModel;
import belajardatabase.mysqllop.InsertSQL;
import java.sql.ResultSet;
import java.sql.SQLException;
import javax.swing.JOptionPane;
import javax.swing.SwingUtilities;

/**
 *
 * @author ASEP
 */
public class Edit extends javax.swing.JPanel {

    MobilTableModel model = null;

    javax.swing.JFrame frame = null;

    private String noPolisi = "";

    /**
     * Creates new form entry
     */

```

```

public Edit(javax.swing.JFrame frame, String noPolisi) {

    this.frame = frame;

    this.noPolisi = noPolisi;


    initComponents();


    try {
        initModel();
    } catch (Exception e) {
        System.out.println("Error inside `initModel` : " + e.getMessage());
    }


    initForm();


    // listen when mainWindow is closed
    frame.addWindowListener(new java.awt.event.WindowAdapter() {

        @Override

        public void windowClosing(java.awt.event.WindowEvent windowEvent) {

            model.sql.closeDBConnection();

        }

    });
}


public void initModel() throws Exception {

    model = new MobilTableModel();


    model.sql.select.where("noPolisi", "=", noPolisi);
    ResultSet rs = model.sql.select.execute();
    model.save(rs);
    model.sql.getConnection().close(rs);
}

```

```

    if (model.getRowCount() != 1) {
        throw new Exception("No. Polisi tidak ditemukan");
    }
}

public void initForm() {
    String noPolisi = model.getValueAt(0, 0).toString();
    String merk = model.getValueAt(0, 1).toString();
    String warna = model.getValueAt(0, 4).toString();
    String tahun = model.getValueAt(0, 5).toString();
    String hargaSewa12Jam = model.getValueAt(0, 2).toString();
    String hargaSewa24Jam = model.getValueAt(0, 3).toString();
    String dendaPerJam = model.getValueAt(0, 6).toString();
    int status = Integer.valueOf(model.getValueAt(0, 7).toString());

    noPolisiField.setText(noPolisi);
    merkField.setText(merk);
    warnaField.setText(warna);
    tahunField.setText(tahun);
    hargaSewa24JamField.setText(hargaSewa24Jam);
    dendaPerJamField.setText(dendaPerJam);
    statusComboBox.setSelectedItem(
        status == MobilTableModel.STATUS_TERSEDIA ?
        "Tersedia" : "Tidak Tersedia"
    );
}

```

```
/**
```

- * 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.

```

*/
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">///GEN-BEGIN:initComponents
private void initComponents() {

    fieldPanel = new javax.swing.JPanel();
    jLabel1 = new javax.swing.JLabel();
    noPolisiField = new javax.swing.JTextField();
    jLabel2 = new javax.swing.JLabel();
    merkField = new javax.swing.JTextField();
    jLabel3 = new javax.swing.JLabel();
    warnaField = new javax.swing.JTextField();
    jLabel4 = new javax.swing.JLabel();
    tahunField = new javax.swing.JTextField();
    jLabel5 = new javax.swing.JLabel();
    hargaSewa12JamField = new javax.swing.JTextField();
    jLabel6 = new javax.swing.JLabel();
    hargaSewa24JamField = new javax.swing.JTextField();
    jLabel7 = new javax.swing.JLabel();
    dendaPerJamField = new javax.swing.JTextField();
    jLabel8 = new javax.swing.JLabel();
    statusComboBox = new javax.swing.JComboBox();
    jLabel9 = new javax.swing.JLabel();
    simpanButton = new javax.swing.JButton();
    jLabel10 = new javax.swing.JLabel();
    jScrollPane2 = new javax.swing.JScrollPane();
    messageTextPane = new javax.swing.JTextPane();

    setMaximumSize(new java.awt.Dimension(626, 666));
    setMinimumSize(new java.awt.Dimension(626, 666));
    setPreferredSize(new java.awt.Dimension(626, 666));

```

```
fieldPanel.setLayout(new java.awt.GridLayout(9, 2, 10, 5));
```

```
jLabel1.setText("No. Polisi (9 karakter maksimal)");
```

```
fieldPanel.add(jLabel1);
```

```
noPolisiField.setEditable(false);
```

```
fieldPanel.add(noPolisiField);
```

```
jLabel2.setText("Merk");
```

```
fieldPanel.add(jLabel2);
```

```
fieldPanel.add(merkField);
```

```
jLabel3.setText("Warna");
```

```
fieldPanel.add(jLabel3);
```

```
fieldPanel.add(warnaField);
```

```
jLabel4.setText("Tahun");
```

```
fieldPanel.add(jLabel4);
```

```
fieldPanel.add(tahunField);
```

```
jLabel5.setText("Harga Sewa 12 Jam");
```

```
jLabel5.setToolTipText("");
```

```
fieldPanel.add(jLabel5);
```

```
hargaSewa12JamField.setEditable(false);
```

```
hargaSewa12JamField.setText("Tidak Tersedia");
```

```
fieldPanel.add(hargaSewa12JamField);
```

```
jLabel6.setText("Harga Sewa 24 Jam");
```

```
fieldPanel.add(jLabel6);
```



```

fieldPanel.add(hargaSewa24JamField);

jLabel7.setText("Denda Per Jam");
fieldPanel.add(jLabel7);
fieldPanel.add(dendaPerJamField);

jLabel8.setText("Status");
fieldPanel.add(jLabel8);

statusComboBox.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "Tersedia",
"Tidak Tersedia" }));

fieldPanel.add(statusComboBox);

jLabel9.setText("just a gap holder");
fieldPanel.add(jLabel9);

simpanButton.setText("UBAH");
simpanButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        simpanButtonActionPerformed(evt);
    }
});

fieldPanel.add(simpanButton);

jLabel10.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel10.setText("Ubah Data Mobil");

messageTextPane.setEditable(false);
jScrollPane2.setViewportView(messageTextPane);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);

```

```

this.setLayout(layout);

layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(20, 20, 20)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)
                .addComponent(jLabel10)
                .addComponent(fieldPanel, javax.swing.GroupLayout.DEFAULT_SIZE, 357,
Short.MAX_VALUE)
                .addComponent(jScrollPane2))
            .addContainerGap(255, Short.MAX_VALUE))
        );

layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(26, 26, 26)
            .addComponent(jLabel10)
            .addGap(31, 31, 31)
            .addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 56,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(8, 8, 8)
            .addComponent(fieldPanel, javax.swing.GroupLayout.PREFERRED_SIZE, 296,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(227, Short.MAX_VALUE))
        );
} // </editor-fold> // GEN-END: initComponents

```

```

private void simpanButtonActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_simpanButtonActionPerformed

```

```

model.sql.update.where("noPolisi", noPolisi);
model.sql.update.set("merk", merkField.getText());

```

```

model.sql.update.set("warna", warnaField.getText());
model.sql.update.set(
    "tahun",
    Integer.valueOf(tahunField.getText())
);
model.sql.update.set(
    "hargaSewa24Jam",
    Integer.valueOf(hargaSewa24JamField.getText())
);
model.sql.update.set(
    "dendaPerJam",
    Integer.valueOf(dendaPerJamField.getText())
);
model.sql.update.set("status", statusComboBox
    .getSelectedItem().toString() == "Tersedia" ?
    MobilTableModel.STATUS_TERSEDIA :
    MobilTableModel.STATUS_TIDAK_TERSEDIA
);

boolean success = model.sql.update.execute();

String pesan = "Gagal mengubah data";
if (success) pesan = "Sukses mengubah data";
JOptionPane.showMessageDialog(frame, pesan);

if (success) redirectToView();
} //GEN-LAST:event_simpanButtonActionPerformed

public void redirectToView() {
    javax.swing.JPanel en = new belajardatabase.mobil.View(frame);

```

```

        frame.setContentPane(en);

        SwingUtilities.updateComponentTreeUI(frame.getContentPane());
    }

    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JTextField dendaPerJamField;
    private javax.swing.JPanel fieldPanel;
    private javax.swing.JTextField hargaSewa12JamField;
    private javax.swing.JTextField hargaSewa24JamField;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel10;
    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.JTextField merkField;
    private javax.swing.JTextPane messageTextPane;
    private javax.swing.JTextField noPolisiField;
    private javax.swing.JButton simpanButton;
    private javax.swing.JComboBox statusComboBox;
    private javax.swing.JTextField tahunField;
    private javax.swing.JTextField warnaField;
    // End of variables declaration//GEN-END:variables
}

./utilities/DateUtility.java

/*

```

* 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 belajardatabase.utilities;
```

```
import belajardatabase.model.KotaTableModel;
```

```
import belajardatabase.mysqllop.SelectSQL;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import java.text.ParseException;
```

```
import java.text.SimpleDateFormat;
```

```
import java.util.Date;
```

```
import java.util.Locale;
```

```
/**
```

```
 *
```

```
 * @author ASEP
```

```
 */
```

```
public class DateUtility {
```

```
    public static String getDayFromDateString(String dateString, String dateStringFormat) {
```

```
        String result = "";
```

```
        try {
```

```
            SimpleDateFormat inputFormat = new SimpleDateFormat(dateStringFormat, Locale.US);
```

```
            Date date = (Date) inputFormat.parse(dateString);
```

```
            SimpleDateFormat outputFormat = new SimpleDateFormat("dd", Locale.US);
```

```
            result = outputFormat.format(date);
```

```
        } catch (ParseException e) {
```

```

        System.out.println("Error inside `getDayFromDateString`: "
            + e.getMessage());
    }
    return result;
}

public static String getMonthFromDateString(String dateString, String dateStringFormat) {
    String result = "";

    try {
        SimpleDateFormat inputFormat = new SimpleDateFormat(dateStringFormat, Locale.US);
        Date date = (Date) inputFormat.parse(dateString);
        SimpleDateFormat outputFormat = new SimpleDateFormat("MM", Locale.US);
        result = outputFormat.format(date);
    } catch (ParseException e) {
        System.out.println("Error inside `getMonthFromDateString`: "
            + e.getMessage());
    }
    return result;
}

public static String getYearFromDateString(String dateString, String dateStringFormat) {
    String result = "";

    try {
        SimpleDateFormat inputFormat = new SimpleDateFormat(dateStringFormat, Locale.US);
        Date date = (Date) inputFormat.parse(dateString);
        SimpleDateFormat outputFormat = new SimpleDateFormat("yyyy", Locale.US);
        result = outputFormat.format(date);
    } catch (ParseException e) {
        System.out.println("Error inside `getYearFromDateString`: "

```

```

        + e.getMessage());
    }
    return result;
}

public static int getDifferenceBetweenTwoDate(
    String date1String,
    String date2String,
    String dateStringFormat
){
    int day = -1;
    String mysqlDateFormat = "yyyy-MM-dd";
    date1String = convertDateStringToAnotherformat(date1String,
        dateStringFormat, mysqlDateFormat);
    date2String = convertDateStringToAnotherformat(date2String,
        dateStringFormat, mysqlDateFormat);

    // model spesifiknya tidak penting, yang penting bisa mengeksekusi query
    // untuk menghitung interval hari dari dua tanggal
    KotaTableModel model = new KotaTableModel();
    model.sql.select.select(
        "DATEDIFF('" + date1String + "', '" + date2String + "') AS day"
    );
    model.sql.select.where("namaKota", "=", "Jakarta");
    ResultSet rs = model.sql.select.execute();

    try {
        if (rs.next()) {
            day = Math.abs(rs.getInt("day"));
        } else {
            // jika tidak ada Jakarta, ganti.

```

```

        System.out.println("Error: didalam getDateDifferenceBetweenTwoDate,"
            + "Jakarta tidak ditemukan");
    }
} catch (SQLException e) {
    System.out.println("Error inside `getDateDifferenceBetweenTwoDate`: "
        + e.getMessage());
}
model.sql.getConnection().close(rs);

return day;
}

public static String convertDateStringToAnotherformat(
    String dateString,
    String dateStringOldFormat,
    String dateStringNewFormat
){
    String result = "";

    try {
        SimpleDateFormat inputFormat = new SimpleDateFormat(dateStringOldFormat, Locale.US);
        Date date = (Date) inputFormat.parse(dateString);

        SimpleDateFormat outputFormat = new SimpleDateFormat(dateStringNewFormat,
Locale.US);
        result = outputFormat.format(date);
    } catch (ParseException e) {
        System.out.println("Error inside `parseDate`: "
            + e.getMessage());
    }
    return result;
}

```



```

    public static String convertToMysqlDate(
        String dateString,
        String dateStringFormat
    ){
        String mysqlDateFormat = "yyyy-MM-dd";
        return convertDateStringToAnotherformat(dateString, dateStringFormat, mysqlDateFormat);
    }
}

```

./utilities/Pagination.java

/*

* 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 belajardatabase.utilities;

```

```

import belajardatabase.model.MobilTableModel;

```

```

import belajardatabase.mysqllop.SQLHandler;

```

```

import java.sql.ResultSet;

```

```

import java.sql.SQLException;

```

```

import javax.swing.JLabel;

```

```

import javax.swing.table.AbstractTableModel;

```

```

import belajardatabase.model.MyAbstractModel;

```

```

import javax.swing.JComboBox;

```

/**

*

* @author ASEP

*/

```

public class Pagination {

    /* model that used by JTable for displaying data */
    private MyAbstractModel model          = null;

    /* number of items per page */
    private int          pageLength        = -1;


    /* current page */
    private int currentPage = -1;

    /* number of pages available in pagination */
    private int pageCount  = -1;


    /**
     * this is just for easy-to-read purpose
     *
     * for example,
     * if you change sql in model then execute it
     * pagination also need to update their @var current_page, and
     * @var pageCount. So, you will call updatePagination() method after
     * that. This is more easy-to-read:
     *
     *      model.sql.where("noPolisi=123");
     *      ResultSet rs = model.execute();
     *      model.save(rs);
     *
     *      pagination.isSQLChanged.updatePagination();
     *
     * rather than:
     *      ``
     *
     *      model.sql.where("noPolisi=123");
     *      ResultSet rs = model.execute();
     *      model.save(rs);

```

```

*
*    pagination.updatePagination();
*
*
*/
public Pagination isSQLChanged = this;
public PaginationGUIComponent GUIComponent = null;

public Pagination() {
    GUIComponent = new PaginationGUIComponent(this);
}

public void init() {
    updatePagination();
    GUIComponent.init();
}

public void setModel(MyAbstractModel model) {
    this.model = model;
}

public void setPageLength(int dataPerPage) {
    this.pageLength = dataPerPage;
}

public int movePrevious() {
    currentPage -= 1;

    if (currentPage >= 1) return getNewOffset(currentPage);

    currentPage = 1;
}

```

```

        return getNewOffset(currentPage);
    }

    public int moveNext() {
        currentPage += 1;

        if (currentPage <= pageCount) return getNewOffset(currentPage);

        currentPage = pageCount;
        return getNewOffset(currentPage);
    }

    public int jumpToFirst() {
        currentPage = 1;
        return getNewOffset(currentPage);
    }

    public int jumpToLast() {
        currentPage = pageCount;
        return getNewOffset(currentPage);
    }

    public int jumpTo(int pageTarget) {
        currentPage = pageTarget;
        return getNewOffset(currentPage);
    }

    /** recommended to use as below:
    *
    *   pagination.isSQLChange.updatePagination();

```

```

*
* @return new offset
*/
public int updatePagination() {
    currentPage = 1; // even when record of result query is empty

    countPageCount(); // if SQL change, the page count also.

    GUIComponent.updateComboBox();
    GUIComponent.updateLabel();

    return getNewOffset(currentPage);
}

private int getNewOffset(int newCurrentPage) {
    int newOffset = pageLength * (currentPage - 1);

    return newOffset;
}

private void countPageCount() {
    // [1] backup
    String tmp_select = (String) model.sql.select.get("select");
    int tmp_limit = (int) model.sql.select.get("limit");
    int tmp_offset = (int) model.sql.select.get("offset");

    // [2] change
    model.sql.select.select("count(*) as num_rows");
    model.sql.select.removeLimit();
    ResultSet rs = model.sql.select.execute();

```

```

int pageCount = -1;

try {
    rs.next();

    int num_rows = rs.getInt("num_rows");

    System.out.println("numrows = " + num_rows);

    pageCount = (int) Math.ceil(num_rows / (double) pageLength);
} catch (SQLException e) {
    System.out.println("Error inside `getPageCount` method: "
        + e.getMessage());
} finally {
    model.sql.mdbc.close(rs);

    // [3] recover
    model.sql.select.select(tmp_select);
    model.sql.select.limit(tmp_limit);
    model.sql.select.offset(tmp_offset);
}

this.pageCount = pageCount;
}

public int getPageCount() {
    return pageCount;
}

public int getCurrentPage() {
    return currentPage;
}
}

```

```

./utilities/PaginationGUIComponent.java

/*
 * 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 belajardatabase.utilities;

import javax.swing.JComboBox;
import javax.swing.JLabel;

/**
 *
 * @author ASEP
 */
public class PaginationGUIComponent {
    Pagination pg = null;

    /* GUI component: label for displaying page position in pagination */
    private JLabel    label        = null;

    /* GUI component: combobox for displaying all available page */
    private JComboBox comboBox     = null;

    /* combobox status: is it accept an action or pause */
    private boolean   comboBoxStatus = true;

    public PaginationGUIComponent(Pagination pagination) {
        this.pg = pagination;
    }

    public void init() {

```

```

        initComboBox();
    }

    public void setLabel(JLabel label) {
        this.label = label;
    }

    public void setComboBox(JComboBox comboBox) {
        this.comboBox = comboBox;
    }

    public void update() {
        updateLabel();
        updateComboBox();
    }

    public void updateLabel() {
        int current = pg.getPageCount() > 0 ? pg.getCurrentPage() : 0;

        String text = "Halaman " + current + " dari " + pg.getPageCount();
        label.setText(text);
    }

    public void updateComboBox() {
        comboBoxStatus = COMBOBOX_PAUSE_ANY_ACTION;
        comboBox.setSelectedItem( Integer.toString(pg.getCurrentPage()) );
        comboBoxStatus = COMBOBOX_ACCEPT_ANY_ACTION;
    }

    public void initComboBox() {
        comboBoxStatus = COMBOBOX_PAUSE_ANY_ACTION;

```



```

comboBox.removeAllItems();

for (int i = 1; i <= pg.getPageCount(); i++) {
    comboBox.addItem( Integer.toString(i) );
}

comboBoxStatus = COMBOBOX_ACCEPT_ANY_ACTION; // resume to accept event
}

```

```

public void reinitComboBox() {
    initComboBox();
}

```

```

public boolean getComboBoxStatus() {
    return comboBoxStatus;
}

```

```

/* Since event 'itemStateChanged' also fired when
 * I removeall/add/set-selected item to combobox and make call to
 * updateTable, I have to make any trick.
 *
 * And, here it is.
 *
 * see paginationComboBoxItemStateChanged method to see how this works.
 */
public final static boolean COMBOBOX_ACCEPT_ANY_ACTION    = true;
public final static boolean COMBOBOX_PAUSE_ANY_ACTION     = false;
}

```

./MainWindow.java

```

/*
 * 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 belajardatabase;
```

```
import belajardatabase.mobil.*;
```

```
import belajardatabase.pelanggan.*;
```

```
import belajardatabase.penewaan.*;
```

```
import java.util.regex.Matcher;
```

```
import java.util.regex.Pattern;
```

```
import javax.swing.SwingUtilities;
```

```
import javax.swing.UIManager;
```

```
/**
```

```
*
```

```
* @author ASEP
```

```
*/
```

```
public class MainWindow extends javax.swing.JFrame {
```

```
    interface myInterface {
```

```
        public int myNumber();
```

```
    }
```

```
/**
```

```
* Creates new form mainWindow
```

```
*/
```

```
public MainWindow() {
```

```
    Pattern p = Pattern.compile("[^a-zA-Z0-9]");
```

```
    Matcher m = p.matcher("45");
```

```
    System.out.println("tes = " + (m.find() == true ? "match" : "not match"));
```

```

initComponents();

javax.swing.JPanel en = new belajardatabase.mobil.Entry(this);


this.setContentPane(en);
}


public void callMe(myInterface f) {
    System.out.println("My number is " + f.myNumber());
}


/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN: initComponents
private void initComponents() {

    jMenuBar1 = new javax.swing.JMenuBar();
    jMenu1 = new javax.swing.JMenu();
    mobil_listingMenuItem = new javax.swing.JMenuItem();
    mobil_tambahMenuItem = new javax.swing.JMenuItem();
    jMenu3 = new javax.swing.JMenu();
    menuPelanggan_listing = new javax.swing.JMenuItem();
    menuPelanggan_tambah = new javax.swing.JMenuItem();
    menuPenyewaan_listing = new javax.swing.JMenu();
    penyewaan_listing = new javax.swing.JMenuItem();
    penyewaan_rwayatSewa = new javax.swing.JMenuItem();
    menuPenyewaan_tambah = new javax.swing.JMenuItem();

```

```

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

setMinimumSize(new java.awt.Dimension(626, 666));

setSize(new java.awt.Dimension(626, 666));

jMenu1.setText("Mobil");

mobil_listingMenuItem.setText("Listing");
mobil_listingMenuItem.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        mobil_listingMenuItemActionPerformed(evt);
    }
});
jMenu1.add(mobil_listingMenuItem);

mobil_tambahMenuItem.setText("Tambah");
mobil_tambahMenuItem.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        mobil_tambahMenuItemActionPerformed(evt);
    }
});
jMenu1.add(mobil_tambahMenuItem);

jMenuBar1.add(jMenu1);

jMenu3.setText("Pelanggan");

menuPelanggan_listing.setText("Listing");
menuPelanggan_listing.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        menuPelanggan_listingActionPerformed(evt);
    }
}

```

```

});

jMenu3.add(menuPelanggan_listing);

menuPelanggan_tambah.setText("Tambah");
menuPelanggan_tambah.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        menuPelanggan_tambahActionPerformed(evt);
    }
});

jMenu3.add(menuPelanggan_tambah);

jMenuBar1.add(jMenu3);

menuPenyewaan_listing.setText("Penyewaan");

penyewaan_listing.setText("Listing");
penyewaan_listing.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        penyewaan_listingActionPerformed(evt);
    }
});

menuPenyewaan_listing.add(penyewaan_listing);

penyewaan_riwayatSewa.setText("Riwayat Sewa");
penyewaan_riwayatSewa.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        penyewaan_riwayatSewaActionPerformed(evt);
    }
});

menuPenyewaan_listing.add(penyewaan_riwayatSewa);

```

```

menuPenyewaan_tambah.setText("Tambah");
menuPenyewaan_tambah.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        menuPenyewaan_tambahActionPerformed(evt);
    }
});
menuPenyewaan_listing.add(menuPenyewaan_tambah);

jMenuBar1.add(menuPenyewaan_listing);

setJMenuBar(jMenuBar1);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGap(0, 626, Short.MAX_VALUE)
);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGap(0, 645, Short.MAX_VALUE)
);

pack();
} // </editor-fold> // GEN-END: initComponents

private void mobil_listingMenuItemActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_mobil_listingMenuItemActionPerformed

    javax.swing.JPanel en = new belajardatabase.mobil.View(this);

    this.setContentPane(en);

```

```

        updateLookAndFeel();
    }//GEN-LAST:event_mobil_listingMenuItemActionPerformed

    private void mobil_tambahMenuItemActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_mobil_tambahMenuItemActionPerformed

        javax.swing.JPanel en = new belajardatabase.mobil.Entry(this);

        this.setContentPane(en);

        updateLookAndFeel();
    }//GEN-LAST:event_mobil_tambahMenuItemActionPerformed

    private void menuPelanggan_tambahActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_menuPelanggan_tambahActionPerformed

        // TODO add your handling code here:

        javax.swing.JPanel en = new belajardatabase.pelanggan.Entry(this);

        this.setContentPane(en);

        updateLookAndFeel();
    }//GEN-LAST:event_menuPelanggan_tambahActionPerformed

    private void menuPelanggan_listingActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_menuPelanggan_listingActionPerformed

        // TODO add your handling code here:

        javax.swing.JPanel en = new belajardatabase.pelanggan.View(this);

        this.setContentPane(en);

        updateLookAndFeel();
    }//GEN-LAST:event_menuPelanggan_listingActionPerformed

    private void penyewaan_listingActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_penyewaan_listingActionPerformed

        // TODO add your handling code here:

```

```

        javax.swing.JPanel en = new belajardatabase.penyewaan.ViewSewaAktif(this);

        this.setContentPane(en);
        updateLookAndFeel();
    } //GEN-LAST:event_penyewaan_listingActionPerformed

    private void menuPenyewaan_tambahActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_menuPenyewaan_tambahActionPerformed
        // TODO add your handling code here:
        javax.swing.JPanel en = new belajardatabase.penyewaan.Entry(this);

        this.setContentPane(en);
        updateLookAndFeel();
    } //GEN-LAST:event_menuPenyewaan_tambahActionPerformed

    private void penyewaan_riwayatSewaActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_penyewaan_riwayatSewaActionPerformed
        // TODO add your handling code here:
        javax.swing.JPanel en = new belajardatabase.penyewaan.ViewRiwayatSewa(this);

        this.setContentPane(en);
        updateLookAndFeel();
    } //GEN-LAST:event_penyewaan_riwayatSewaActionPerformed

    /**
     * @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(MainWindow.class.getName()).log(java.util.logging.Level.SEVERE,
    null, ex);

        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(MainWindow.class.getName()).log(java.util.logging.Level.SEVERE,
    null, ex);

        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(MainWindow.class.getName()).log(java.util.logging.Level.SEVERE,
    null, ex);

        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(MainWindow.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() {
        try {
            UIManager.setLookAndFeel(UIManager.getSystemLookAndFeelClassName());
        } catch (Exception ex) {

```

```

        ex.printStackTrace();
    }

    javax.swing.JFrame myFrame = new MainWindow();
    myFrame.setVisible(true);
    SwingUtilities.updateComponentTreeUI(myFrame);
}

});
}

```

```

public void updateLookAndFeel() {
    SwingUtilities.updateComponentTreeUI(getContentPane());
}

```

```

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JMenu jMenuItem1;
private javax.swing.JMenu jMenuItem3;
private javax.swing.JMenuBar jMenuItemBar1;
private javax.swing.JMenuItem menuPelanggan_listing;
private javax.swing.JMenuItem menuPelanggan_tambah;
private javax.swing.JMenu menuPenyewaan_listing;
private javax.swing.JMenuItem menuPenyewaan_tambah;
private javax.swing.JMenuItem mobil_listingMenuItem;
private javax.swing.JMenuItem mobil_tambahMenuItem;
private javax.swing.JMenuItem penyewaan_listing;
private javax.swing.JMenuItem penyewaan_riwayatSewa;
// End of variables declaration//GEN-END:variables
}

```

./penyewaan/Entry.java

/*

* 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 belajardatabase.penyewaan;
```

```
import belajardatabase.model.KotaTableModel;
```

```
import belajardatabase.model.MobilTableModel;
```

```
import belajardatabase.model.PelangganTableModel;
```

```
import belajardatabase.model.PenyewaanTableModel;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import java.text.DateFormat;
```

```
import java.text.SimpleDateFormat;
```

```
import java.util.Date;
```

```
import javax.swing.JOptionPane;
```

```
/**
```

```
*
```

```
* @author ASEP
```

```
*/
```

```
public class Entry extends javax.swing.JPanel {
```

```
    MobilTableModel mobilModel = null;
```

```
    PelangganTableModel pelangganModel = null;
```

```
    PenyewaanTableModel penyewaanModel = null;
```

```
    javax.swing.JFrame frame = null;
```

```
/**
```

```
* Creates new form entry
```

```
*/
```

```
public Entry(javax.swing.JFrame frame) {
```

```

this.frame = frame;

initComponents();

initModel();

// listen when mainWindow is closed
frame.addWindowListener(new java.awt.event.WindowAdapter() {
    @Override
    public void windowClosing(java.awt.event.WindowEvent windowEvent) {
        penyewaanModel.sql.closeDBConnection();
        mobilModel.sql.closeDBConnection();
        pelangganModel.sql.closeDBConnection();
    }
});
}

public void initModel() {
    mobilModel = new MobilTableModel();
    pelangganModel = new PelangganTableModel();
    penyewaanModel = new PenyewaanTableModel();
}

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN: initComponents
private void initComponents() {

```

```
jPanel2 = new javax.swing.JPanel();
simpanButton = new javax.swing.JButton();
resetButton = new javax.swing.JButton();
dataDetailPanel = new javax.swing.JPanel();
jPanel4 = new javax.swing.JPanel();
jLabel8 = new javax.swing.JLabel();
noPolisiField = new javax.swing.JTextField();
jPanel3 = new javax.swing.JPanel();
jLabel9 = new javax.swing.JLabel();
hargaSewa24JamField = new javax.swing.JTextField();
jPanel5 = new javax.swing.JPanel();
jLabel10 = new javax.swing.JLabel();
merkField = new javax.swing.JTextField();
jPanel11 = new javax.swing.JPanel();
jLabel16 = new javax.swing.JLabel();
hargaSewa12JamField = new javax.swing.JTextField();
jPanel8 = new javax.swing.JPanel();
jLabel12 = new javax.swing.JLabel();
warnaField = new javax.swing.JTextField();
jPanel9 = new javax.swing.JPanel();
jLabel11 = new javax.swing.JLabel();
dendaPerJamField = new javax.swing.JTextField();
jPanel10 = new javax.swing.JPanel();
jLabel14 = new javax.swing.JLabel();
tahunField = new javax.swing.JTextField();
jPanel12 = new javax.swing.JPanel();
dataDetailPanel2 = new javax.swing.JPanel();
jPanel23 = new javax.swing.JPanel();
jLabel22 = new javax.swing.JLabel();
noKTPField = new javax.swing.JTextField();
jPanel24 = new javax.swing.JPanel();
```

```
jLabel23 = new javax.swing.JLabel();
pekerjaanField = new javax.swing.JTextField();
jPanel25 = new javax.swing.JPanel();
jLabel24 = new javax.swing.JLabel();
namaField = new javax.swing.JTextField();
jPanel26 = new javax.swing.JPanel();
jLabel25 = new javax.swing.JLabel();
alamatField = new javax.swing.JTextField();
jPanel27 = new javax.swing.JPanel();
jLabel26 = new javax.swing.JLabel();
jenisKelaminField = new javax.swing.JTextField();
jPanel28 = new javax.swing.JPanel();
jLabel13 = new javax.swing.JLabel();
kotaField = new javax.swing.JTextField();
jPanel29 = new javax.swing.JPanel();
jLabel27 = new javax.swing.JLabel();
tanggalLahirField = new javax.swing.JTextField();
jPanel30 = new javax.swing.JPanel();
jLabel15 = new javax.swing.JLabel();
teleponField = new javax.swing.JTextField();
jPanel31 = new javax.swing.JPanel();
jLabel28 = new javax.swing.JLabel();
noHPField = new javax.swing.JTextField();
jPanel32 = new javax.swing.JPanel();
jLabel17 = new javax.swing.JLabel();
emailField = new javax.swing.JTextField();
pencarianMobilField = new javax.swing.JTextField();
jLabel1 = new javax.swing.JLabel();
pencarianPelangganField = new javax.swing.JTextField();
jLabel4 = new javax.swing.JLabel();
jPanel1 = new javax.swing.JPanel();
```

```

jLabel3 = new javax.swing.JLabel();
jPanel6 = new javax.swing.JPanel();
tglSewaHariField = new javax.swing.JTextField();
tglSewaBulanField = new javax.swing.JTextField();
tglSewaTahunField = new javax.swing.JTextField();
jLabel2 = new javax.swing.JLabel();
jPanel7 = new javax.swing.JPanel();
tglBatasKembaliHariField = new javax.swing.JTextField();
tglBatasKembaliBulanField = new javax.swing.JTextField();
tglBatasKembaliTahunField = new javax.swing.JTextField();

setMaximumSize(new java.awt.Dimension(626, 666));
setMinimumSize(new java.awt.Dimension(626, 666));

jPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder(null, "Form Penyewaan Mobil",
javax.swing.border.TitledBorder.DEFAULT_JUSTIFICATION,
javax.swing.border.TitledBorder.DEFAULT_POSITION, new java.awt.Font("Tahoma", 0, 11), new
java.awt.Color(51, 51, 51))); // NOI18N

jPanel2.setForeground(new java.awt.Color(51, 51, 51));
jPanel2.setPreferredSize(new java.awt.Dimension(388, 300));

simpanButton.setText("SEWAKAN");
simpanButton.setName("btn_simpan"); // NOI18N
simpanButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        simpanButtonActionPerformed(evt);
    }
});

resetButton.setText("RESET");
resetButton.setName("resetButton"); // NOI18N
resetButton.addActionListener(new java.awt.event.ActionListener() {

```

```

    public void actionPerformed(java.awt.event.ActionEvent evt) {
        resetButtonActionPerformed(evt);
    }
});

dataDetailPanel.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Mobil"));
dataDetailPanel.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
dataDetailPanel.setMinimumSize(new java.awt.Dimension(367, 163));
dataDetailPanel.setLayout(new java.awt.GridLayout(4, 4, 30, 10));

jPanel4.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel8.setText("No. Polisi");
jPanel4.add(jLabel8);

noPolisiField.setEditable(false);
noPolisiField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        noPolisiFieldActionPerformed(evt);
    }
});
jPanel4.add(noPolisiField);

dataDetailPanel.add(jPanel4);

jPanel3.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel9.setText("Harga Sewa 24 Jam");
jPanel3.add(jLabel9);

hargaSewa24JamField.setEditable(false);

```



```
jPanel3.add(hargaSewa24JamField);
```

```
dataDetailPanel.add(jPanel3);
```

```
jPanel5.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel10.setText("Merk");
```

```
jPanel5.add(jLabel10);
```

```
merkField.setEditable(false);
```

```
merkField.setToolTipText("");
```

```
jPanel5.add(merkField);
```

```
dataDetailPanel.add(jPanel5);
```

```
jPanel11.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel16.setText("Harga Sewa 12 Jam");
```

```
jPanel11.add(jLabel16);
```

```
hargaSewa12JamField.setEditable(false);
```

```
jPanel11.add(hargaSewa12JamField);
```

```
dataDetailPanel.add(jPanel11);
```

```
jPanel8.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel12.setText("Warna");
```

```
jPanel8.add(jLabel12);
```

```
warnaField.setEditable(false);
```

```
jPanel8.add(warnaField);
```

```
dataDetailPanel.add(jPanel8);
```

```
jPanel9.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel11.setText("Denda Per Jam ");
```

```
jPanel9.add(jLabel11);
```

```
dendaPerJamField.setEditable(false);
```

```
jPanel9.add(dendaPerJamField);
```

```
dataDetailPanel.add(jPanel9);
```

```
jPanel10.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel14.setText("Tahun");
```

```
jPanel10.add(jLabel14);
```

```
tahunField.setEditable(false);
```

```
jPanel10.add(tahunField);
```

```
dataDetailPanel.add(jPanel10);
```

```
jPanel12.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
dataDetailPanel.add(jPanel12);
```

```
dataDetailPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Informasi"));
```

```
dataDetailPanel2.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
```

```
dataDetailPanel2.setMinimumSize(new java.awt.Dimension(367, 163));
```

```
dataDetailPanel2.setLayout(new java.awt.GridLayout(5, 5, 30, 10));
```

```
jPanel23.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel22.setText("No. KTP");
```

```
jPanel23.add(jLabel22);
```

```
noKTPField.setEditable(false);
```

```
noKTPField.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        noKTPFieldActionPerformed(evt);
```

```
    }
```

```
});
```

```
jPanel23.add(noKTPField);
```

```
dataDetailPanel2.add(jPanel23);
```

```
jPanel24.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel23.setText("Pekerjaan");
```

```
jPanel24.add(jLabel23);
```

```
pekerjaanField.setEditable(false);
```

```
jPanel24.add(pekerjaanField);
```

```
dataDetailPanel2.add(jPanel24);
```

```
jPanel25.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel24.setText("Nama");
```

```
jPanel25.add(jLabel24);
```

```
namaField.setEditable(false);
jPanel25.add(namaField);

dataDetailPanel2.add(jPanel25);

jPanel26.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel25.setText("Alamat");
jPanel26.add(jLabel25);

alamatField.setEditable(false);
jPanel26.add(alamatField);

dataDetailPanel2.add(jPanel26);

jPanel27.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel26.setText("Jenis Kelamin");
jPanel27.add(jLabel26);

jenisKelaminField.setEditable(false);
jPanel27.add(jenisKelaminField);

dataDetailPanel2.add(jPanel27);

jPanel28.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel13.setText("Kota");
jPanel28.add(jLabel13);

kotaField.setEditable(false);
```

```
jPanel28.add(kotaField);
```

```
dataDetailPanel2.add(jPanel28);
```

```
jPanel29.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel27.setText("Tanggal Lahir");
```

```
jPanel29.add(jLabel27);
```

```
tanggalLahirField.setEditable(false);
```

```
jPanel29.add(tanggalLahirField);
```

```
dataDetailPanel2.add(jPanel29);
```

```
jPanel30.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel15.setText("Telepon");
```

```
jPanel30.add(jLabel15);
```

```
teleponField.setEditable(false);
```

```
jPanel30.add(teleponField);
```

```
dataDetailPanel2.add(jPanel30);
```

```
jPanel31.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel28.setText("No. HP");
```

```
jPanel31.add(jLabel28);
```

```
noHPField.setEditable(false);
```

```
jPanel31.add(noHPField);
```

```

dataDetailPanel2.add(jPanel31);

jPanel32.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel17.setText("Email");
jPanel32.add(jLabel17);

emailField.setEditable(false);
jPanel32.add(emailField);

dataDetailPanel2.add(jPanel32);

pencarianMobilField.setText("No. Polisi atau Merk");
pencarianMobilField.setToolTipText("Kotak Pencarian");

pencarianMobilField.setBorder(javax.swing.BorderFactory.createCompoundBorder(javax.swing.Border
erFactory.createBevelBorder(javax.swing.border.BevelBorder.LOWERED, java.awt.Color.white,
java.awt.Color.white, java.awt.Color.white, java.awt.Color.lightGray),
javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFactory.createEmptyBorder(0
, 5, 0, 5), javax.swing.BorderFactory.createMatteBorder(0, 0, 0, 16, new
javax.swing.ImageIcon("C:\\Users\\ASEP\\Downloads\\1498141047_icon-111-search.png")))); //
NOI18N

pencarianMobilField.setMargin(new java.awt.Insets(0, 0, 0, 0));
pencarianMobilField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        pencarianMobilFieldActionPerformed(evt);
    }
});

jLabel1.setText("Cari Mobil");

pencarianPelangganField.setText("No KTP atau Nama");

```

```

pencarianPelangganField.setToolTipText("Kotak Pencarian");

pencarianPelangganField.setBorder(javax.swing.BorderFactory.createCompoundBorder(javax.swing.
    BorderLayoutFactory.createBevelBorder(javax.swing.border.BevelBorder.LOWERED, java.awt.Color.white,
    java.awt.Color.white, java.awt.Color.white, java.awt.Color.lightGray),
    javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFactory.createEmptyBorder(0
    , 5, 0, 5), javax.swing.BorderFactory.createMatteBorder(0, 0, 0, 16, new
    javax.swing.ImageIcon("C:\\Users\\ASEP\\Downloads\\1498141047_icon-111-search.png")))); //
    NOI18N

pencarianPelangganField.setMargin(new java.awt.Insets(0, 0, 0, 0));

pencarianPelangganField.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        pencarianPelangganFieldActionPerformed(evt);

    }

});

jLabel4.setText("Cari Pelanggan");

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Penyewaan"));

jPanel1.setLayout(new java.awt.GridLayout(2, 2, 10, 10));

jLabel3.setText("Tanggal Sewa");

jPanel1.add(jLabel3);

jPanel6.setLayout(new java.awt.GridLayout(1, 3, 10, 0));

tglSewaHariField.setText("HH");

jPanel6.add(tglSewaHariField);

tglSewaBulanField.setText("MM");

jPanel6.add(tglSewaBulanField);

tglSewaTahunField.setText("YYYY");

```

```

jPanel6.add(tglSewaTahunField);

jPanel1.add(jPanel6);

jLabel2.setText("Akhir Sewa");
jPanel1.add(jLabel2);

jPanel7.setLayout(new java.awt.GridLayout(1, 3, 10, 0));

tglBatasKembaliHariField.setText("HH");
jPanel7.add(tglBatasKembaliHariField);

tglBatasKembaliBulanField.setText("MM");
jPanel7.add(tglBatasKembaliBulanField);

tglBatasKembaliTahunField.setText("YYYY");
jPanel7.add(tglBatasKembaliTahunField);

jPanel1.add(jPanel7);

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .add(jPanel2Layout.createSequentialGroup()
                    .addGroup(jPanel2Layout.createSequentialGroup()
                        .addContainerGap()

```



```

        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(dataDetailPanel2, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)

        .addComponent(dataDetailPanel, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, 554, Short.MAX_VALUE)))

    .addGroup(jPanel2Layout.createSequentialGroup())

    .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(jPanel2Layout.createSequentialGroup()

            .addGap(29, 29, 29)

            .addComponent(jLabel1)

            .addGap(41, 41, 41)

            .addComponent(pencarianMobilField, javax.swing.GroupLayout.PREFERRED_SIZE,
333, javax.swing.GroupLayout.PREFERRED_SIZE))

            .addGroup(jPanel2Layout.createSequentialGroup()

                .addGap(36, 36, 36)

                .addComponent(jLabel4)

                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

                .addComponent(pencarianPelangganField,
javax.swing.GroupLayout.PREFERRED_SIZE, 332, javax.swing.GroupLayout.PREFERRED_SIZE)))

            .addGap(0, 0, Short.MAX_VALUE)))

        .addContainerGap())

    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel2Layout.createSequentialGroup()

        .addGap(0, 0, Short.MAX_VALUE)

        .addComponent(simpanButton, javax.swing.GroupLayout.PREFERRED_SIZE, 85,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

        .addComponent(resetButton, javax.swing.GroupLayout.PREFERRED_SIZE, 88,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(190, 190, 190))

    );

```

```

jPanel2Layout.setVerticalGroup(

jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(jPanel2Layout.createSequentialGroup()

.addContainerGap()

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(pencarianMobilField, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(jLabel1))

.addGap(20, 20, 20)

.addComponent(dataDetailPanel, javax.swing.GroupLayout.PREFERRED_SIZE, 144,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel4)

.addComponent(pencarianPelangganField, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

.addGap(18, 18, 18)

.addComponent(dataDetailPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

.addGap(30, 30, 30)

.addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

.addGap(28, 28, 28)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(simpanButton, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)

.addComponent(resetButton, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))

.addContainerGap(117, Short.MAX_VALUE))

);

```

```

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE, 586,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(30, 30, 30))
        );
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT_SIZE, 705, Short.MAX_VALUE)
            .addGap(10, 10, 10))
        );
} // </editor-fold> // GEN-END: initComponents

```

```

private void pencarianMobilFieldActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_pencarianMobilFieldActionPerformed

```

```

    String searchText = pencarianMobilField.getText();

```

```

    // reset where clause

```

```

    String sign = "USER SEARCH";

```

```

    mobilModel.sql.select.removeWhereBySegmentSign(sign);

```

```

    mobilModel.sql.select.whereSegmentStart(sign);

```

```

    mobilModel.sql.select.whereGroupingStart("");

```

```

    mobilModel.sql.select.where("noPolisi", "LIKE", "%" + searchText + "%");

```

```

    mobilModel.sql.select.orWhere("merk", "LIKE", "%" + searchText + "%");

```

```

    mobilModel.sql.select.whereGroupingEnd();

```

```
mobilModel.sql.select.andWhere("status", "=", MobilTableModel.STATUS_TERSEDIA);  
mobilModel.sql.select.whereSegmentEnd(sign);
```

```
ResultSet rs = mobilModel.sql.select.execute();  
mobilModel.save(rs);  
mobilModel.sql.getConnection().close(rs);
```

```
if (mobilModel.getRowCount() == 1) {  
    String noPolisi = mobilModel.getValueAt(0, 0).toString();  
    String merk = mobilModel.getValueAt(0, 1).toString();  
    String warna = mobilModel.getValueAt(0, 4).toString();  
    String tahun = mobilModel.getValueAt(0, 5).toString();  
    String hargaSewa12Jam = mobilModel.getValueAt(0, 2).toString();  
    String hargaSewa24Jam = mobilModel.getValueAt(0, 3).toString();  
    String dendaPerJam = mobilModel.getValueAt(0, 6).toString();  
    String status = mobilModel.getValueAt(0, 7).toString();
```

```
    noPolisiField.setText(noPolisi);  
    merkField.setText(merk);  
    warnaField.setText(warna);  
    tahunField.setText(tahun);  
    hargaSewa12JamField.setText(hargaSewa12Jam);  
    hargaSewa24JamField.setText(hargaSewa24Jam);  
    dendaPerJamField.setText(dendaPerJam);
```

```
} else {  
    if (mobilModel.getRowCount() > 1) {  
        JOptionPane.showMessageDialog(  
            frame,  
            "Kata kunci Anda kurang spesifik\n"  
            + "la cocok terhadap satu lebih data"  
        );
```

```

    }
}

} //GEN-LAST:event_pencarianMobilFieldActionPerformed

private void simpanButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_simpanButtonActionPerformed

    //waktu

    String tglSewa = tglSewaTahunField.getText()

        + "-" + tglSewaBulanField.getText()

        + "-" + tglSewaHariField.getText();

    String tglBatasSewa = tglBatasKembaliTahunField.getText()

        + "-" + tglBatasKembaliBulanField.getText()

        + "-" + tglBatasKembaliHariField.getText();

    //pelanggan

    String noKTP = noKTPField.getText();

    //mobil

    String noPolisi = noPolisiField.getText();

    try {

        penyewaanModel.sql.insert.reset();

        penyewaanModel.sql.insert.value("noKTP", noKTP);

        penyewaanModel.sql.insert.value("noPolisi", noPolisi);

        penyewaanModel.sql.insert.value("tanggalSewa", tglSewa);

        penyewaanModel.sql.insert.value("batasKembali", tglBatasSewa);

        penyewaanModel.sql.insert.value("tanggalKembali", "0000-00-00");

        penyewaanModel.sql.insert.value("subTotal", 0); // nnti ketika mobil dikembalikan

        penyewaanModel.sql.insert.value("denda", 0);
    }
}

```

```

mobilModel.sql.update.where("noPolisi", noPolisi);
mobilModel.sql.update.set("status", MobilTableModel.STATUS_TIDAK_TERSEDIA);
boolean success2 = mobilModel.sql.update.execute();

boolean success1 = penyewaanModel.sql.insert.execute();

String pesan = "Gagal menyewa mobil";
if (success1 && success2) pesan = "Berhasil menyewa mobil";

JOptionPane.showMessageDialog(null, pesan);

reset();

} catch (Exception e) {
    System.out.println("Error in `sendButtonActionPerformed` : " + e.getMessage());
}
}

//GEN-LAST:event_simpanButtonActionPerformed

private void resetButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_resetButtonActionPerformed
    reset();
}

//GEN-LAST:event_resetButtonActionPerformed

private void noPolisiFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_noPolisiFieldActionPerformed
    // TODO add your handling code here:
}

//GEN-LAST:event_noPolisiFieldActionPerformed

private void noKTPFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_noKTPFieldActionPerformed
    // TODO add your handling code here:
}

```

```
//GEN-LAST:event_noKTPFieldActionPerformed
```

```
private void pencarianPelangganFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_pencarianPelangganFieldActionPerformed
```

```
String searchText = pencarianPelangganField.getText();
```

```
// reset where clause
```

```
String sign = "USER SEARCH";
```

```
pelangganModel.sql.select.removeWhereBySegmentSign(sign);
```

```
pelangganModel.sql.select.whereSegmentStart(sign);
```

```
pelangganModel.sql.select.where("noKTP", "LIKE", "%" + searchText + "%");
```

```
pelangganModel.sql.select.orWhere("nama", "LIKE", "%" + searchText + "%");
```

```
pelangganModel.sql.select.whereSegmentEnd(sign);
```

```
ResultSet rs = pelangganModel.sql.select.execute();
```

```
pelangganModel.save(rs);
```

```
pelangganModel.sql.getConnection().close(rs);
```

```
if (pelangganModel.getRowCount() == 1) {
```

```
String noKTP = pelangganModel.getValueAt(0, 0).toString();
```

```
String nama = pelangganModel.getValueAt(0, 1).toString();
```

```
String tanggalLahir = pelangganModel.getValueAt(0, 2).toString();
```

```
String pekerjaan = pelangganModel.getValueAt(0, 3).toString();
```

```
String alamat = pelangganModel.getValueAt(0, 4).toString();
```

```
String jenisKelamin = pelangganModel.getValueAt(0, 5).toString();
```

```
String idKota = pelangganModel.getValueAt(0, 6).toString();
```

```
String telepon = pelangganModel.getValueAt(0, 7).toString();
```

```
String handphone = pelangganModel.getValueAt(0, 8).toString();
```

```
String email = pelangganModel.getValueAt(0, 9).toString();
```

```

if (isCanRentACar(noKTP) == false) return;

int jenkel = Integer.valueOf(jenisKelamin);
KotaTableModel kotaModel = new KotaTableModel();
String namaKota = kotaModel.getNamaKotaById(
    Integer.valueOf(idKota)
);

noKTPField.setText(noKTP);
namaField.setText(nama);
if (jenkel == PelangganTableModel.PRIA) {
    jenisKelaminField.setText("Laki-laki");
} else {
    jenisKelaminField.setText("Perempuan");
}
tanggalLahirField.setText(tanggalLahir);
pekerjaanField.setText(pekerjaan);
alamatField.setText(alamat);
kotaField.setText(namaKota);
teleponField.setText(telepon);
noHPField.setText(handphone);
emailField.setText(email);
} else {
    if (pelangganModel.getRowCount() > 1) {
        JOptionPane.showMessageDialog(
            frame,
            "Kata kunci Anda kurang spesifik\n"
            + "Ia cocok terhadap satu lebih data"
        );
    }
}
}

```



```

} //GEN-LAST:event_pencarianPelangganFieldActionPerformed

// pelanggan yang bisa menyewa adalah yang sedang tidak menyewa sebuah
// kendaraan. Dengan kata lain, penyewa tersebut tidak boleh menyewa 2 kali
public boolean isCanRentACar(String noKTP) {
    penyewaanModel.sql.select.reset();
    penyewaanModel.sql.select.where("noKTP", "=", noKTP);
    penyewaanModel.sql.select.andWhere("tanggalKembali", "=", "0000-00-00");
    ResultSet rs = penyewaanModel.sql.select.execute();
    try {
        if (rs.next()) {
            JOptionPane.showMessageDialog(
                frame,
                "Pelanggan saat ini sedang menyewa",
                "Peringatan",
                JOptionPane.WARNING_MESSAGE
            );
            return false;
        }
    } catch (SQLException e) {
        System.out.println("Error : " + e.getMessage());
        return false;
    }
    penyewaanModel.sql.getConnection().close(rs);

    return true;
}

public void reset() {
    pencarianMobilField.setText("");
    pencarianPelangganField.setText("");
}

```

```

noPolisiField.setText("");
merkField.setText("");
warnaField.setText("");
tahunField.setText("");
hargaSewa12JamField.setText("");
hargaSewa24JamField.setText("");
dendaPerJamField.setText("");


noKTPField.setText("");
namaField.setText("");
jenisKelaminField.setText("");
tanggalLahirField.setText("");
pekerjaanField.setText("");
alamatField.setText("");
kotaField.setText("");
teleponField.setText("");
noHPField.setText("");
emailField.setText("");


tglSewaTahunField.setText("");
tglSewaBulanField.setText("");
tglSewaHariField.setText("");
tglBatasKembaliTahunField.setText("");
tglBatasKembaliBulanField.setText("");
tglBatasKembaliHariField.setText("");
}


// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JTextField alamatField;
private javax.swing.JPanel dataDetailPanel;

```

```
private javax.swing.JPanel dataDetailPanel2;
private javax.swing.JTextField dendaPerJamField;
private javax.swing.JTextField emailField;
private javax.swing.JTextField hargaSewa12JamField;
private javax.swing.JTextField hargaSewa24JamField;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel22;
private javax.swing.JLabel jLabel23;
private javax.swing.JLabel jLabel24;
private javax.swing.JLabel jLabel25;
private javax.swing.JLabel jLabel26;
private javax.swing.JLabel jLabel27;
private javax.swing.JLabel jLabel28;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel10;
private javax.swing.JPanel jPanel11;
private javax.swing.JPanel jPanel12;
private javax.swing.JPanel jPanel2;
```

```
private javax.swing.JPanel jPanel23;  
private javax.swing.JPanel jPanel24;  
private javax.swing.JPanel jPanel25;  
private javax.swing.JPanel jPanel26;  
private javax.swing.JPanel jPanel27;  
private javax.swing.JPanel jPanel28;  
private javax.swing.JPanel jPanel29;  
private javax.swing.JPanel jPanel3;  
private javax.swing.JPanel jPanel30;  
private javax.swing.JPanel jPanel31;  
private javax.swing.JPanel jPanel32;  
private javax.swing.JPanel jPanel4;  
private javax.swing.JPanel jPanel5;  
private javax.swing.JPanel jPanel6;  
private javax.swing.JPanel jPanel7;  
private javax.swing.JPanel jPanel8;  
private javax.swing.JPanel jPanel9;  
private javax.swing.JTextField jenisKelaminField;  
private javax.swing.JTextField kotaField;  
private javax.swing.JTextField merkField;  
private javax.swing.JTextField namaField;  
private javax.swing.JTextField noHPField;  
private javax.swing.JTextField noKTPField;  
private javax.swing.JTextField noPolisiField;  
private javax.swing.JTextField pekerjaanField;  
private javax.swing.JTextField pencarianMobilField;  
private javax.swing.JTextField pencarianPelangganField;  
private javax.swing.JButton resetButton;  
private javax.swing.JButton simpanButton;  
private javax.swing.JTextField tahunField;  
private javax.swing.JTextField tanggalLahirField;
```

```

private javax.swing.JTextField teleponField;
private javax.swing.JTextField tglBatasKembaliBulanField;
private javax.swing.JTextField tglBatasKembaliHariField;
private javax.swing.JTextField tglBatasKembaliTahunField;
private javax.swing.JTextField tglSewaBulanField;
private javax.swing.JTextField tglSewaHariField;
private javax.swing.JTextField tglSewaTahunField;
private javax.swing.JTextField warnaField;
// End of variables declaration//GEN-END:variables
}

./penyewaan/ViewRiwayatSewa.java
/*
 * 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 belajardatabase.penyewaan;

import belajardatabase.model.KotaTableModel;
import belajardatabase.model.MobilTableModel;
import belajardatabase.model.PelangganTableModel;
import belajardatabase.mysqllop.MyDBConnection;
import belajardatabase.model.PenyewaanTableModel;
import belajardatabase.utilities.Pagination;
import belajardatabase.utilities.PaginationGUIComponent;
import static com.sun.java.accessibility.util.AWTEventMonitor.addWindowListener;
import java.awt.event.ItemEvent;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;
import java.sql.Connection;

```

```

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import javax.swing.table.TableColumn;

/**
 *
 * @author ASEP
 */
public class ViewRiwayatSewa extends javax.swing.JPanel {

    PenyewaanTableModel penyewaanModel = null;

    MobilTableModel mobilModel = null;

    PelangganTableModel pelangganModel = null;

    Pagination pagination = null;

    KotaTableModel kotaModel = null;

    /**
     * Creates new form view
     */
    public ViewRiwayatSewa(javax.swing.JFrame frame) {
        initComponents();

        initModel();

        initPagination();

        initTable();

        // listen when mainWindow is closed
        frame.addWindowListener(new java.awt.event.WindowAdapter() {

            @Override
            public void windowClosing(java.awt.event.WindowEvent windowEvent) {
                penyewaanModel.sql.closeDBConnection();
            }
        });
    }

```

```

        mobilModel.sql.closeDBConnection();
        pelangganModel.sql.closeDBConnection();
    }
});
}

public void initModel() {
    ResultSet rs = null;

    /* init penyewaan penyewaanModel */
    penyewaanModel = new PenyewaanTableModel();

    penyewaanModel.sql.select.where("tanggalKembali", "<>", "0000-00-00");
    penyewaanModel.sql.select.limit(penyewaanModel.dataPerPage);
    penyewaanModel.sql.select.offset(0);

    rs = penyewaanModel.sql.select.execute();
    penyewaanModel.save(rs);
    penyewaanModel.sql.getConnection().close(rs);

    /* init pelanggan model */
    pelangganModel = new PelangganTableModel();

    /* init mobil model */
    mobilModel = new MobilTableModel();

    /* init kota model */
    kotaModel = new KotaTableModel();
}

public void initPagination() {
    pagination = new Pagination();
    pagination.setModel(penyewaanModel);
}

```

```

        pagination.setPageLength(penyewaanModel.dataPerPage);
        pagination.GUIComponent.setLabel(positionPaginationLabel);
        pagination.GUIComponent.setComboBox(paginationComboBox);
        pagination.init();
    }

```

```

public void initTable() {
    viewTable.setModel(penyewaanModel);

    // leave only 4 column in table
    for (int i = 4; i < penyewaanModel.getColumnCount(); i++) {
        TableColumn col = viewTable.getColumnModel().getColumn(4);
        viewTable.getColumnModel().removeColumn(col);
    }

    updateTable();
}

```

```

private String getPencarianSQLQuery() {
    String cari = pencarianField.getText();
    return "(" +
        "idSewa like " + quoteWithPercent(cari) + " OR " +
        "noKTP   like " + quoteWithPercent(cari) +
        ")";
}

```

```

public String quoteWithPercent(String content) {
    return "'" + content + "'";
}

```



```

public void updateTable() {
    penyewaanModel.fireTableDataChanged();
}

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-BEGIN: initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jPanel1 = new javax.swing.JPanel();
    firstPaginationButton = new javax.swing.JButton();
    previousPaginationButton = new javax.swing.JButton();
    paginationComboBox = new javax.swing.JComboBox();
    nextPaginationButton = new javax.swing.JButton();
    lastPaginationButton = new javax.swing.JButton();
    positionPaginationLabel = new javax.swing.JLabel();
    viewScrollPane = new javax.swing.JScrollPane();
    viewTable = new javax.swing.JTable();
    jScrollPane1 = new javax.swing.JScrollPane();
    jPanel6 = new javax.swing.JPanel();
    dataDetailPanel2 = new javax.swing.JPanel();
    jPanel23 = new javax.swing.JPanel();
    jLabel28 = new javax.swing.JLabel();
    noPolisiField = new javax.swing.JTextField();
    jPanel24 = new javax.swing.JPanel();

```

```
jLabel29 = new javax.swing.JLabel();
hargaSewa12JamField = new javax.swing.JTextField();
jPanel2 = new javax.swing.JPanel();
jLabel30 = new javax.swing.JLabel();
merkField = new javax.swing.JTextField();
jPanel25 = new javax.swing.JPanel();
jLabel31 = new javax.swing.JLabel();
hargaSewa24JamField = new javax.swing.JTextField();
jPanel26 = new javax.swing.JPanel();
jLabel32 = new javax.swing.JLabel();
warnaField = new javax.swing.JTextField();
jPanel27 = new javax.swing.JPanel();
jLabel33 = new javax.swing.JLabel();
dendaPerJamField = new javax.swing.JTextField();
jPanel28 = new javax.swing.JPanel();
jLabel34 = new javax.swing.JLabel();
tahunField = new javax.swing.JTextField();
jPanel29 = new javax.swing.JPanel();
jLabel35 = new javax.swing.JLabel();
statusField = new javax.swing.JTextField();
dataDetailPanel = new javax.swing.JPanel();
jPanel4 = new javax.swing.JPanel();
jLabel8 = new javax.swing.JLabel();
field_no_ktp = new javax.swing.JTextField();
jPanel3 = new javax.swing.JPanel();
jLabel9 = new javax.swing.JLabel();
field_pekerjaan = new javax.swing.JTextField();
jPanel5 = new javax.swing.JPanel();
jLabel10 = new javax.swing.JLabel();
field_nama = new javax.swing.JTextField();
jPanel11 = new javax.swing.JPanel();
```

```

jLabel11 = new javax.swing.JLabel();
field_alamat = new javax.swing.JTextField();
jPanel8 = new javax.swing.JPanel();
jLabel12 = new javax.swing.JLabel();
field_jk = new javax.swing.JTextField();
jPanel9 = new javax.swing.JPanel();
jLabel13 = new javax.swing.JLabel();
field_kota = new javax.swing.JTextField();
jPanel10 = new javax.swing.JPanel();
jLabel14 = new javax.swing.JLabel();
field_tgl_lahir = new javax.swing.JTextField();
jPanel12 = new javax.swing.JPanel();
jLabel15 = new javax.swing.JLabel();
field_telepon = new javax.swing.JTextField();
jPanel13 = new javax.swing.JPanel();
jLabel16 = new javax.swing.JLabel();
field_no_hp = new javax.swing.JTextField();
jPanel14 = new javax.swing.JPanel();
jLabel17 = new javax.swing.JLabel();
field_email = new javax.swing.JTextField();
pencarianField = new javax.swing.JTextField();
jLabel2 = new javax.swing.JLabel();

setMaximumSize(new java.awt.Dimension(626, 666));
setMinimumSize(new java.awt.Dimension(626, 666));
setPreferredSize(new java.awt.Dimension(626, 666));

jLabel1.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel1.setText("Tabel Riwayat Penyewaan");

jPanel1.setMaximumSize(new java.awt.Dimension(626, 666));

```

```

jPanel1.setMinimumSize(new java.awt.Dimension(626, 666));
jPanel1.setPreferredSize(new java.awt.Dimension(626, 666));

firstPaginationButton.setText("<<");
firstPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        firstPaginationButtonActionPerformed(evt);
    }
});

previousPaginationButton.setText("<");
previousPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        previousPaginationButtonActionPerformed(evt);
    }
});

paginationComboBox.addItemListener(new java.awt.event.ItemListener() {
    public void itemStateChanged(java.awt.event.ItemEvent evt) {
        paginationComboBoxItemStateChanged(evt);
    }
});

paginationComboBox.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        paginationComboBoxActionPerformed(evt);
    }
});

nextPaginationButton.setText(">");
nextPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {

```

```

        nextPaginationButtonActionPerformed(evt);
    }
});

lastPaginationButton.setText(">>");
lastPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        lastPaginationButtonActionPerformed(evt);
    }
});

positionPaginationLabel.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
positionPaginationLabel.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
positionPaginationLabel.setText("Halaman 1 dari 200");
positionPaginationLabel.setAlignmentX(0.5F);

viewTable.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {},
        {},
        {},
        {}
    },
    new String [] {

    }
));

viewTable.setAutoResizeMode(javax.swing.JTable.AUTO_RESIZE_ALL_COLUMNS);
viewTable.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        viewTableMouseClicked(evt);
    }
});

```

```

    }
});

viewScrollPane.setViewportView(viewTable);

dataDetailPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Mobil"));
dataDetailPanel2.setMaximumSize(new java.awt.Dimension(362, 163));
dataDetailPanel2.setMinimumSize(new java.awt.Dimension(362, 163));
dataDetailPanel2.setPreferredSize(new java.awt.Dimension(362, 163));
dataDetailPanel2.setLayout(new java.awt.GridLayout(4, 2, 40, 10));

jPanel23.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel28.setText("No. Polisi");
jPanel23.add(jLabel28);

noPolisiField.setEditable(false);
noPolisiField.setText("Pilih baris data");
jPanel23.add(noPolisiField);

dataDetailPanel2.add(jPanel23);

jPanel24.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel29.setText("Harga Sewa 12 Jam");
jPanel24.add(jLabel29);

hargaSewa12JamField.setEditable(false);
hargaSewa12JamField.setText("Pilih baris data");
jPanel24.add(hargaSewa12JamField);

dataDetailPanel2.add(jPanel24);

```

```
jPanel2.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel30.setText("Merk");
```

```
jPanel2.add(jLabel30);
```

```
merkField.setEditable(false);
```

```
merkField.setText("Pilih baris data");
```

```
jPanel2.add(merkField);
```

```
dataDetailPanel2.add(jPanel2);
```

```
jPanel25.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel31.setText("Harga Sewa 24 Jam");
```

```
jPanel25.add(jLabel31);
```

```
hargaSewa24JamField.setEditable(false);
```

```
hargaSewa24JamField.setText("Pilih baris data");
```

```
jPanel25.add(hargaSewa24JamField);
```

```
dataDetailPanel2.add(jPanel25);
```

```
jPanel26.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel32.setText("Warna");
```

```
jPanel26.add(jLabel32);
```

```
warnaField.setEditable(false);
```

```
warnaField.setText("Pilih baris data");
```

```
jPanel26.add(warnaField);
```

```
dataDetailPanel2.add(jPanel26);
```

```
jPanel27.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel33.setText("Denda per Jam");
```

```
jPanel27.add(jLabel33);
```

```
dendaPerJamField.setEditable(false);
```

```
dendaPerJamField.setText("Pilih baris data");
```

```
jPanel27.add(dendaPerJamField);
```

```
dataDetailPanel2.add(jPanel27);
```

```
jPanel28.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel34.setText("Tahun");
```

```
jPanel28.add(jLabel34);
```

```
tahunField.setEditable(false);
```

```
tahunField.setText("Pilih baris data");
```

```
jPanel28.add(tahunField);
```

```
dataDetailPanel2.add(jPanel28);
```

```
jPanel29.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel35.setText("Status");
```

```
jPanel29.add(jLabel35);
```

```
statusField.setEditable(false);
```



```

statusField.setText("Pilih baris data");
jPanel29.add(statusField);

dataDetailPanel2.add(jPanel29);

dataDetailPanel.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Pelanggan"));
dataDetailPanel.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
dataDetailPanel.setMinimumSize(new java.awt.Dimension(367, 163));
dataDetailPanel.setLayout(new java.awt.GridLayout(5, 5, 30, 10));

jPanel4.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel8.setText("No. KTP");
jPanel4.add(jLabel8);

field_no_ktp.setEditable(false);
field_no_ktp.setText("Pilih baris data");
field_no_ktp.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        field_no_ktpActionPerformed(evt);
    }
});
jPanel4.add(field_no_ktp);

dataDetailPanel.add(jPanel4);

jPanel3.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel9.setText("Pekerjaan");
jPanel3.add(jLabel9);

```

```
field_pekerjaan.setEditable(false);
field_pekerjaan.setText("Pilih baris data");
jPanel3.add(field_pekerjaan);

dataDetailPanel.add(jPanel3);

jPanel5.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel10.setText("Nama");
jPanel5.add(jLabel10);

field_nama.setEditable(false);
field_nama.setText("Pilih baris data");
jPanel5.add(field_nama);

dataDetailPanel.add(jPanel5);

jPanel11.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel11.setText("Alamat");
jPanel11.add(jLabel11);

field_alamat.setEditable(false);
field_alamat.setText("Pilih baris data");
jPanel11.add(field_alamat);

dataDetailPanel.add(jPanel11);

jPanel8.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel12.setText("Jenis Kelamin");
```

```
jPanel8.add(jLabel12);

field_jk.setEditable(false);
field_jk.setText("Pilih baris data");
jPanel8.add(field_jk);

dataDetailPanel.add(jPanel8);

jPanel9.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel13.setText("Kota");
jPanel9.add(jLabel13);

field_kota.setEditable(false);
field_kota.setText("Pilih baris data");
jPanel9.add(field_kota);

dataDetailPanel.add(jPanel9);

jPanel10.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel14.setText("Tanggal Lahir");
jPanel10.add(jLabel14);

field_tgl_lahir.setEditable(false);
field_tgl_lahir.setText("Pilih baris data");
jPanel10.add(field_tgl_lahir);

dataDetailPanel.add(jPanel10);

jPanel12.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel15.setText("Telepon");
```

```
jPanel12.add(jLabel15);
```

```
field_telepon.setEditable(false);
```

```
field_telepon.setText("Pilih baris data");
```

```
jPanel12.add(field_telepon);
```

```
dataDetailPanel.add(jPanel12);
```

```
jPanel13.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel16.setText("No. HP");
```

```
jPanel13.add(jLabel16);
```

```
field_no_hp.setEditable(false);
```

```
field_no_hp.setText("Pilih baris data");
```

```
jPanel13.add(field_no_hp);
```

```
dataDetailPanel.add(jPanel13);
```

```
jPanel14.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel17.setText("Email");
```

```
jPanel14.add(jLabel17);
```

```
field_email.setEditable(false);
```

```
field_email.setText("Pilih baris data");
```

```
jPanel14.add(field_email);
```

```
dataDetailPanel.add(jPanel14);
```

```

javax.swing.GroupLayout jPanel6Layout = new javax.swing.GroupLayout(jPanel6);
jPanel6.setLayout(jPanel6Layout);
jPanel6Layout.setHorizontalGroup(
    jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel6Layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addComponent(dataDetailPanel, javax.swing.GroupLayout.DEFAULT_SIZE, 567,
                Short.MAX_VALUE)
            .addGap(10, 10, 10)
            .addComponent(dataDetailPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addGap(10, 10, 10)
    );
jPanel6Layout.setVerticalGroup(
    jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel6Layout.createSequentialGroup()
            .addGap(10, 10, 10)
            .addComponent(dataDetailPanel, javax.swing.GroupLayout.PREFERRED_SIZE, 209,
                javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(10, 10, 10)
            .addComponent(dataDetailPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(10, 10, 10))
    );

jScrollPane1.setViewportView(jPanel6);

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

```

```

        .addGroup(jPanel1Layout.createSequentialGroup())
        .addContainerGap()

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(viewScrollPane)
        .addGroup(jPanel1Layout.createSequentialGroup())
            .addComponent(firstPaginationButton)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(previousPaginationButton)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(paginationComboBox, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(nextPaginationButton)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(lastPaginationButton)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
            .addComponent(positionPaginationLabel)
            .addGap(0, 0, Short.MAX_VALUE))
        .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 606,
Short.MAX_VALUE))
        .addContainerGap()
    );

    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup())
                .addComponent(viewScrollPane, javax.swing.GroupLayout.PREFERRED_SIZE, 124,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

```

```

        .addComponent(positionPaginationLabel, javax.swing.GroupLayout.PREFERRED_SIZE, 23,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(lastPaginationButton)

        .addComponent(nextPaginationButton)

        .addComponent(paginationComboBox, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(firstPaginationButton)

        .addComponent(previousPaginationButton))

        .addGap(18, 18, 18)

        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 311,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addContainerGap(178, Short.MAX_VALUE))

);

```

```

pencarianField.setToolTipText("Kotak Pencarian");

```

```

pencarianField.setBorder(javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFac
tory.createBevelBorder(javax.swing.border.BevelBorder.LOWERED, java.awt.Color.white,
java.awt.Color.white, java.awt.Color.white, java.awt.Color.lightGray),
javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFactory.createEmptyBorder(0
, 5, 0, 5), javax.swing.BorderFactory.createMatteBorder(0, 0, 0, 16, new
javax.swing.ImageIcon("C:\\Users\\ASEP\\Downloads\\1498141047_icon-111-search.png")))); //
NOI18N

```

```

pencarianField.setMargin(new java.awt.Insets(0, 0, 0, 0));

pencarianField.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        pencarianFieldActionPerformed(evt);

    }

});

```

```

jLabel2.setText("Pencarian :");

```

```

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);

this.setLayout(layout);

```

```

layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addGroup(layout.createSequentialGroup())
            .addContainerGap()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup())
                    .addComponent(jLabel1)
                    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
                .addGroup(layout.createSequentialGroup())
                    .addComponent(jLabel2)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(pencarianField, javax.swing.GroupLayout.PREFERRED_SIZE, 397,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(77, 77, 77))))
);

layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup())
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jLabel1)
            .addGap(31, 31, 31)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(pencarianField, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(31, 31, 31)
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
);

} // </editor-fold> // GEN-END: initComponents

```



```
private void firstPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_firstPaginationButtonActionPerformed
```

```
    // TODO add your handling code here:
```

```
    int newOffset = pagination.jumpToFirst();
```

```
    pagination.GUIComponent.update();
```

```
    penyewaanModel.sql.select.offset(newOffset);
```

```
    ResultSet rs = penyewaanModel.sql.select.execute();
```

```
    penyewaanModel.save(rs);
```

```
    penyewaanModel.sql.getConnection().close(rs);
```

```
    updateTable();
```

```
    } //GEN-LAST:event_firstPaginationButtonActionPerformed
```

```
private void previousPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_previousPaginationButtonActionPerformed
```

```
    // TODO add your handling code here:
```

```
    int newOffset = pagination.movePrevious();
```

```
    pagination.GUIComponent.update();
```

```
    penyewaanModel.sql.select.offset(newOffset);
```

```
    ResultSet rs = penyewaanModel.sql.select.execute();
```

```
    penyewaanModel.save(rs);
```

```
    penyewaanModel.sql.getConnection().close(rs);
```

```
    updateTable();
```

```
    } //GEN-LAST:event_previousPaginationButtonActionPerformed
```

```
private void paginationComboBoxItemStateChanged(java.awt.event.ItemEvent evt) { //GEN-FIRST:event_paginationComboBoxItemStateChanged
```

```
    // TODO add your handling code here:
```

```

if (evt.getStateChange() == ItemEvent.DESELECTED &&
    pagination.GUIComponent.getComboBoxStatus() ==
    PaginationGUIComponent.COMBOBOX_ACCEPT_ANY_ACTION)
{
    System.out.println("Posisi " + "paginationComboBox");

    int selectedPage = Integer.valueOf(paginationComboBox
        .getSelectedItem()
        .toString());

    int newOffset = pagination.jumpTo(selectedPage);
    pagination.GUIComponent.update();

    penyewaanModel.sql.select.offset(newOffset);
    ResultSet rs = penyewaanModel.sql.select.execute();
    penyewaanModel.save(rs);
    penyewaanModel.sql.getConnection().close(rs);

    updateTable();

}
}

private void paginationComboBoxActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:

}

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

```

```

// TODO add your handling code here:

int newOffset = pagination.moveToNext();

pagination.GUIComponent.update();


penyewaanModel.sql.select.offset(newOffset);

ResultSet rs = penyewaanModel.sql.select.execute();

penyewaanModel.save(rs);

penyewaanModel.sql.getConnection().close(rs);


updateTable();
} //GEN-LAST:event_nextPaginationButtonActionPerformed


private void lastPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_lastPaginationButtonActionPerformed

// TODO add your handling code here:

int newOffset = pagination.jumpToLast();

pagination.GUIComponent.update();


penyewaanModel.sql.select.offset(newOffset);

ResultSet rs = penyewaanModel.sql.select.execute();

penyewaanModel.save(rs);

penyewaanModel.sql.getConnection().close(rs);


updateTable();
} //GEN-LAST:event_lastPaginationButtonActionPerformed


/**
 * Fill in data detail pelanggan from specific pelanggan
 */
private void showDataDetailOfPelanggan(int selectedRow) {

String noKTP = "";

```

```

String nama = "";
String tanggalLahir = "";
String pekerjaan = "";
String alamat = "";
String jenisKelamin = "";
int idKota = 0;
String telepon = "";
String handphone = "";
String email = "";

int row = selectedRow;
noKTP = viewTable.getValueAt(row, 2).toString();

pelangganModel.sql.select.reset();
pelangganModel.sql.select.where("noKTP", "=", noKTP);
ResultSet rs = pelangganModel.sql.select.execute();
try {
    if (rs.next() == false) return;

    nama = rs.getString("nama");
    tanggalLahir = rs.getString("tanggalLahir");
    pekerjaan = rs.getString("pekerjaan");
    alamat = rs.getString("alamat");
    jenisKelamin = rs.getString("jenisKelamin");
    idKota = rs.getInt("idKota");
    telepon = rs.getString("telepon");
    handphone = rs.getString("handphone");
    email = rs.getString("email");
} catch (SQLException e) {

}

```

```

mobilModel.sql.getConnection().close(rs);

/* get nama kota from id kota */
String namaKota = kotaModel.getNamaKotaById(idKota);
/* get jenis kelamin */
int jenkel = Integer.parseInt(jenisKelamin);

field_no_ktp.setText(noKTP);
field_nama.setText(nama);
if (jenkel == PelangganTableModel.PEREMPUAN) {
    field_jk.setText("Perempuan");
}else{
    field_jk.setText("Laki-laki");
}
field_tgl_lahir.setText(tanggalLahir);
field_pekerjaan.setText(pekerjaan);
field_alamat.setText(alamat);
field_kota.setText(namaKota);
field_telepon.setText(telepon);
field_email.setText(email);
field_no_hp.setText(handphone);
}

/**
 * Fill in data detail pelanggan from specific pelanggan
 */
private void showDataDetailOfMobil(int selectedRow) {
    String noPolisi = "";
    String merk = "";
    String warna = "";
    String tahun = "";

```

```

String hargaSewa12Jam = "";
String hargaSewa24Jam = "";
String dendaPerJam = "";
String status = "";

int row = selectedRow;
noPolisi = viewTable.getValueAt(row, 1).toString();

mobilModel.sql.select.reset();
mobilModel.sql.select.where("noPolisi", "=", noPolisi);
ResultSet rs = mobilModel.sql.select.execute();
try {
    if (rs.next() == false) return;

    merk = rs.getString("merk");
    warna = rs.getString("warna");
    tahun = rs.getString("tahun");
    hargaSewa12Jam = rs.getString("hargaSewa12Jam");
    hargaSewa24Jam = rs.getString("hargaSewa24Jam");
    dendaPerJam = rs.getString("dendaPerJam");
    status = rs.getString("status");
} catch (SQLException e) {

}

mobilModel.sql.getConnection().close(rs);

noPolisiField.setText(noPolisi);
merkField.setText(merk);
warnaField.setText(warna);
tahunField.setText(tahun);
hargaSewa12JamField.setText(hargaSewa12Jam);

```

```

hargaSewa24JamField.setText(hargaSewa24Jam);

dendaPerJamField.setText(dendaPerJam);

statusField.setText(
    Integer.valueOf(status) == MobilTableModel.STATUS_TERSEDIA
    ? "Tersedia" : "Tidak Tersedia"
);
}

```

```

private void viewTableMouseClicked(java.awt.event.MouseEvent evt) {GEN-
FIRST:event_viewTableMouseClicked

```

```

    int row = viewTable.getSelectedRow();

    if (row != -1) {
        showDataDetailOfPelanggan(row);
        showDataDetailOfMobil(row);
    }

```

```

}GEN-LAST:event_viewTableMouseClicked

```

```

private void field_no_ktpActionPerformed(java.awt.event.ActionEvent evt) {GEN-
FIRST:event_field_no_ktpActionPerformed

```

```

    // TODO add your handling code here:

}GEN-LAST:event_field_no_ktpActionPerformed

```

```

private void pencarianFieldActionPerformed(java.awt.event.ActionEvent evt) {GEN-
FIRST:event_pencarianFieldActionPerformed

```

```

    // TODO add your handling code here:

    String searchText = pencarianField.getText();

    // reset where clause

    String sign = "USER SEARCH";

    penyewaanModel.sql.select.removeWhereBySegmentSign(sign);

```

```

    penyewaanModel.sql.select.whereSegmentStart(sign);

```

```

        penyewaanModel.sql.select.where("idSewa", "LIKE", "%" + searchText + "%");
        penyewaanModel.sql.select.orWhere("noKTP", "LIKE", "%" + searchText + "%");
        penyewaanModel.sql.select.whereSegmentEnd(sign);

        int newOffset = pagination.isSQLChanged.updatePagination();
        pagination.isSQLChanged.GUIComponent.reinitComboBox();
        pagination.GUIComponent.update();

        penyewaanModel.sql.select.offset(newOffset);
        ResultSet rs = penyewaanModel.sql.select.execute();
        penyewaanModel.save(rs);
        penyewaanModel.sql.getConnection().close(rs);

        updateTable();
    } //GEN-LAST:event_pencarianFieldActionPerformed

    public String quotate(String content) {
        return "\"" + content + "\"";
    }

    // Variables declaration - do not modify //GEN-BEGIN:variables
    private javax.swing.JPanel dataDetailPanel;
    private javax.swing.JPanel dataDetailPanel2;
    private javax.swing.JTextField dendaPerJamField;
    private javax.swing.JTextField field_alamat;
    private javax.swing.JTextField field_email;
    private javax.swing.JTextField field_jk;
    private javax.swing.JTextField field_kota;
    private javax.swing.JTextField field_nama;
    private javax.swing.JTextField field_no_hp;
    private javax.swing.JTextField field_no_ktp;

```



```
private javax.swing.JTextField field_pekerjaan;
private javax.swing.JTextField field_telepon;
private javax.swing.JTextField field_tgl_lahir;
private javax.swing.JButton firstPaginationButton;
private javax.swing.JTextField hargaSewa12JamField;
private javax.swing.JTextField hargaSewa24JamField;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel28;
private javax.swing.JLabel jLabel29;
private javax.swing.JLabel jLabel30;
private javax.swing.JLabel jLabel31;
private javax.swing.JLabel jLabel32;
private javax.swing.JLabel jLabel33;
private javax.swing.JLabel jLabel34;
private javax.swing.JLabel jLabel35;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel10;
private javax.swing.JPanel jPanel11;
private javax.swing.JPanel jPanel12;
private javax.swing.JPanel jPanel13;
```

```
private javax.swing.JPanel jPanel14;
private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel23;
private javax.swing.JPanel jPanel24;
private javax.swing.JPanel jPanel25;
private javax.swing.JPanel jPanel26;
private javax.swing.JPanel jPanel27;
private javax.swing.JPanel jPanel28;
private javax.swing.JPanel jPanel29;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel5;
private javax.swing.JPanel jPanel6;
private javax.swing.JPanel jPanel8;
private javax.swing.JPanel jPanel9;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JButton lastPaginationButton;
private javax.swing.JTextField merkField;
private javax.swing.JButton nextPaginationButton;
private javax.swing.JTextField noPolisiField;
private javax.swing.JComboBox paginationComboBox;
private javax.swing.JTextField pencarianField;
private javax.swing.JLabel positionPaginationLabel;
private javax.swing.JButton previousPaginationButton;
private javax.swing.JTextField statusField;
private javax.swing.JTextField tahunField;
private javax.swing.JScrollPane viewScrollPane;
private javax.swing.JTable viewTable;
private javax.swing.JTextField warnaField;
// End of variables declaration//GEN-END:variables
}
```

```

./penyewaan/ViewSewaAktif.java
/*
 * 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 belajardatabase.penyewaan;

import belajardatabase.model.KotaTableModel;
import belajardatabase.model.MobilTableModel;
import belajardatabase.model.PelangganTableModel;
import belajardatabase.mysqllop.MyDBConnection;
import belajardatabase.model.PenyewaanTableModel;
import belajardatabase.utilities.Pagination;
import belajardatabase.utilities.PaginationGUIComponent;
import static com.sun.java.accessibility.util.AWTEventMonitor.addWindowListener;
import java.awt.event.ItemEvent;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import javax.swing.JOptionPane;
import javax.swing.SwingUtilities;
import javax.swing.table.TableColumn;

/**
 *
 * @author ASEP

```

```

*/
public class ViewSewaAktif extends javax.swing.JPanel {

    PenyewaanTableModel penyewaanModel = null;

    MobilTableModel mobilModel = null;

    PelangganTableModel pelangganModel = null;

    Pagination pagination = null;

    KotaTableModel kotaModel = null;

    private javax.swing.JFrame frame = null;

    /**
     * Creates new form view
     */
    public ViewSewaAktif(javax.swing.JFrame frame) {
        this.frame = frame;

        initComponents();

        initModel();

        initPagination();

        initTable();

        // listen when mainWindow is closed
        frame.addWindowListener(new java.awt.event.WindowAdapter() {
            @Override
            public void windowClosing(java.awt.event.WindowEvent windowEvent) {
                penyewaanModel.sql.closeDBConnection();
                mobilModel.sql.closeDBConnection();
                pelangganModel.sql.closeDBConnection();
            }
        });
    }
}

```

```
}
```

```
public void initModel() {
```

```
    ResultSet rs = null;
```

```
    /* init penyewaan penyewaanModel */
```

```
    penyewaanModel = new PenyewaanTableModel();
```

```
    penyewaanModel.sql.select.where("tanggalKembali", "=", "0000-00-00");
```

```
    penyewaanModel.sql.select.limit(penyewaanModel.dataPerPage);
```

```
    penyewaanModel.sql.select.offset(0);
```

```
    rs = penyewaanModel.sql.select.execute();
```

```
    penyewaanModel.save(rs);
```

```
    penyewaanModel.sql.getConnection().close(rs);
```

```
    /* init pelanggan model */
```

```
    pelangganModel = new PelangganTableModel();
```

```
    /* init mobil model */
```

```
    mobilModel = new MobilTableModel();
```

```
    /* init kota model */
```

```
    kotaModel = new KotaTableModel();
```

```
}
```

```
public void initPagination() {
```

```
    pagination = new Pagination();
```

```
    pagination.setModel(penyewaanModel);
```

```
    pagination.setPageLength(penyewaanModel.dataPerPage);
```

```
    pagination.GUIComponent.setLabel(positionPaginationLabel);
```

```
    pagination.GUIComponent.setComboBox(paginationComboBox);
```

```
    pagination.init();
```

```
}
```

```
public void initTable() {  
    viewTable.setModel(penyewaanModel);  
  
    // leave only 4 column in table  
    for (int i = 4; i < penyewaanModel.getColumnCount(); i++) {  
        TableColumn col = viewTable.getColumnModel().getColumn(4);  
        viewTable.getColumnModel().removeColumn(col);  
    }  
  
    updateTable();  
}
```

```
private String getPencarianSQLQuery() {  
    String cari = pencarianField.getText();  
    return "(" +  
        "idSewa like " + quotateWithPercent(cari) + " OR " +  
        "noKTP    like " + quotateWithPercent(cari) +  
        ")";  
}
```

```
public String quotateWithPercent(String content) {  
    return "\"" + content + "\"";  
}
```

```
public void updateTable() {  
    penyewaanModel.fireTableDataChanged();  
}
```

```

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN: initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jPanel1 = new javax.swing.JPanel();
    firstPaginationButton = new javax.swing.JButton();
    previousPaginationButton = new javax.swing.JButton();
    paginationComboBox = new javax.swing.JComboBox();
    nextPaginationButton = new javax.swing.JButton();
    lastPaginationButton = new javax.swing.JButton();
    positionPaginationLabel = new javax.swing.JLabel();
    viewScrollPane = new javax.swing.JScrollPane();
    viewTable = new javax.swing.JTable();
    jScrollPane1 = new javax.swing.JScrollPane();
    jPanel6 = new javax.swing.JPanel();
    dataDetailPanel2 = new javax.swing.JPanel();
    jPanel23 = new javax.swing.JPanel();
    jLabel28 = new javax.swing.JLabel();
    noPolisiField = new javax.swing.JTextField();
    jPanel24 = new javax.swing.JPanel();
    jLabel29 = new javax.swing.JLabel();
    hargaSewa12JamField = new javax.swing.JTextField();
    jPanel2 = new javax.swing.JPanel();
    jLabel30 = new javax.swing.JLabel();

```

```
merkField = new javax.swing.JTextField();
jPanel25 = new javax.swing.JPanel();
jLabel31 = new javax.swing.JLabel();
hargaSewa24JamField = new javax.swing.JTextField();
jPanel26 = new javax.swing.JPanel();
jLabel32 = new javax.swing.JLabel();
warnaField = new javax.swing.JTextField();
jPanel27 = new javax.swing.JPanel();
jLabel33 = new javax.swing.JLabel();
dendaPerJamField = new javax.swing.JTextField();
jPanel28 = new javax.swing.JPanel();
jLabel34 = new javax.swing.JLabel();
tahunField = new javax.swing.JTextField();
jPanel29 = new javax.swing.JPanel();
jLabel35 = new javax.swing.JLabel();
statusField = new javax.swing.JTextField();
dataDetailPanel = new javax.swing.JPanel();
jPanel4 = new javax.swing.JPanel();
jLabel8 = new javax.swing.JLabel();
field_no_ktp = new javax.swing.JTextField();
jPanel3 = new javax.swing.JPanel();
jLabel9 = new javax.swing.JLabel();
field_pekerjaan = new javax.swing.JTextField();
jPanel5 = new javax.swing.JPanel();
jLabel10 = new javax.swing.JLabel();
field_nama = new javax.swing.JTextField();
jPanel11 = new javax.swing.JPanel();
jLabel11 = new javax.swing.JLabel();
field_alamat = new javax.swing.JTextField();
jPanel8 = new javax.swing.JPanel();
jLabel12 = new javax.swing.JLabel();
```



```

field_jk = new javax.swing.JTextField();
jPanel9 = new javax.swing.JPanel();
jLabel13 = new javax.swing.JLabel();
field_kota = new javax.swing.JTextField();
jPanel10 = new javax.swing.JPanel();
jLabel14 = new javax.swing.JLabel();
field_tgl_lahir = new javax.swing.JTextField();
jPanel12 = new javax.swing.JPanel();
jLabel15 = new javax.swing.JLabel();
field_telepon = new javax.swing.JTextField();
jPanel13 = new javax.swing.JPanel();
jLabel16 = new javax.swing.JLabel();
field_no_hp = new javax.swing.JTextField();
jPanel14 = new javax.swing.JPanel();
jLabel17 = new javax.swing.JLabel();
field_email = new javax.swing.JTextField();
pencarianField = new javax.swing.JTextField();
jLabel2 = new javax.swing.JLabel();
tutupPenyewaanButton = new javax.swing.JButton();
hapusButton = new javax.swing.JButton();

setMaximumSize(new java.awt.Dimension(626, 666));
setMinimumSize(new java.awt.Dimension(626, 666));
setPreferredSize(new java.awt.Dimension(626, 666));

jLabel1.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel1.setText("Tabel Penyewaan Aktif");

jPanel1.setMaximumSize(new java.awt.Dimension(626, 666));
jPanel1.setMinimumSize(new java.awt.Dimension(626, 666));
jPanel1.setPreferredSize(new java.awt.Dimension(626, 666));

```

```

firstPaginationButton.setText("<<");

firstPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        firstPaginationButtonActionPerformed(evt);
    }
});

previousPaginationButton.setText("<");

previousPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        previousPaginationButtonActionPerformed(evt);
    }
});

paginationComboBox.addItemListener(new java.awt.event.ItemListener() {
    public void itemStateChanged(java.awt.event.ItemEvent evt) {
        paginationComboBoxItemStateChanged(evt);
    }
});

paginationComboBox.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        paginationComboBoxActionPerformed(evt);
    }
});

nextPaginationButton.setText(">");

nextPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        nextPaginationButtonActionPerformed(evt);
    }
}

```

```

});

lastPaginationButton.setText(">>");
lastPaginationButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        lastPaginationButtonActionPerformed(evt);
    }
});

positionPaginationLabel.setFont(new java.awt.Font("Tahoma", 0, 12)); // NOI18N
positionPaginationLabel.setHorizontalAlignment(javax.swing.SwingConstants.LEFT);
positionPaginationLabel.setText("Halaman 1 dari 200");
positionPaginationLabel.setAlignmentX(0.5F);

viewTable.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {},
        {},
        {},
        {}
    },
    new String [] {

    }
));

viewTable.setAutoResizeMode(javax.swing.JTable.AUTO_RESIZE_ALL_COLUMNS);
viewTable.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        viewTableMouseClicked(evt);
    }
});

```

```

viewScrollPane.setViewportView(viewTable);

dataDetailPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Mobil"));
dataDetailPanel2.setMaximumSize(new java.awt.Dimension(362, 163));
dataDetailPanel2.setMinimumSize(new java.awt.Dimension(362, 163));
dataDetailPanel2.setPreferredSize(new java.awt.Dimension(362, 163));
dataDetailPanel2.setLayout(new java.awt.GridLayout(4, 2, 40, 10));

jPanel23.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel28.setText("No. Polisi");
jPanel23.add(jLabel28);

noPolisiField.setEditable(false);
noPolisiField.setText("Pilih baris data");
jPanel23.add(noPolisiField);

dataDetailPanel2.add(jPanel23);

jPanel24.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel29.setText("Harga Sewa 12 Jam");
jPanel24.add(jLabel29);

hargaSewa12JamField.setEditable(false);
hargaSewa12JamField.setText("Pilih baris data");
jPanel24.add(hargaSewa12JamField);

dataDetailPanel2.add(jPanel24);

jPanel2.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

```

```
jLabel30.setText("Merk");
```

```
jPanel2.add(jLabel30);
```

```
merkField.setEditable(false);
```

```
merkField.setText("Pilih baris data");
```

```
jPanel2.add(merkField);
```

```
dataDetailPanel2.add(jPanel2);
```

```
jPanel25.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel31.setText("Harga Sewa 24 Jam");
```

```
jPanel25.add(jLabel31);
```

```
hargaSewa24JamField.setEditable(false);
```

```
hargaSewa24JamField.setText("Pilih baris data");
```

```
jPanel25.add(hargaSewa24JamField);
```

```
dataDetailPanel2.add(jPanel25);
```

```
jPanel26.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel32.setText("Warna");
```

```
jPanel26.add(jLabel32);
```

```
warnaField.setEditable(false);
```

```
warnaField.setText("Pilih baris data");
```

```
jPanel26.add(warnaField);
```

```
dataDetailPanel2.add(jPanel26);
```

```
jPanel27.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel33.setText("Denda per Jam");
```

```
jPanel27.add(jLabel33);
```

```
dendaPerJamField.setEditable(false);
```

```
dendaPerJamField.setText("Pilih baris data");
```

```
jPanel27.add(dendaPerJamField);
```

```
dataDetailPanel2.add(jPanel27);
```

```
jPanel28.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel34.setText("Tahun");
```

```
jPanel28.add(jLabel34);
```

```
tahunField.setEditable(false);
```

```
tahunField.setText("Pilih baris data");
```

```
jPanel28.add(tahunField);
```

```
dataDetailPanel2.add(jPanel28);
```

```
jPanel29.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel35.setText("Status");
```

```
jPanel29.add(jLabel35);
```

```
statusField.setEditable(false);
```

```
statusField.setText("Pilih baris data");
```

```
jPanel29.add(statusField);
```

```
dataDetailPanel2.add(jPanel29);
```

```
dataDetailPanel.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Pelanggan"));
```

```
dataDetailPanel.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
```

```
dataDetailPanel.setMinimumSize(new java.awt.Dimension(367, 163));
```

```
dataDetailPanel.setLayout(new java.awt.GridLayout(5, 5, 30, 10));
```

```
jPanel4.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel8.setText("No. KTP");
```

```
jPanel4.add(jLabel8);
```

```
field_no_ktp.setEditable(false);
```

```
field_no_ktp.setText("Pilih baris data");
```

```
field_no_ktp.addActionListener(new java.awt.event.ActionListener() {
```

```
    public void actionPerformed(java.awt.event.ActionEvent evt) {
```

```
        field_no_ktpActionPerformed(evt);
```

```
    }
```

```
});
```

```
jPanel4.add(field_no_ktp);
```

```
dataDetailPanel.add(jPanel4);
```

```
jPanel3.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel9.setText("Pekerjaan");
```

```
jPanel3.add(jLabel9);
```

```
field_pekerjaan.setEditable(false);
```

```
field_pekerjaan.setText("Pilih baris data");
```

```
jPanel3.add(field_pekerjaan);
```

```
dataDetailPanel.add(jPanel3);
```

```
jPanel5.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel10.setText("Nama");
```

```
jPanel5.add(jLabel10);
```

```
field_nama.setEditable(false);
```

```
field_nama.setText("Pilih baris data");
```

```
jPanel5.add(field_nama);
```

```
dataDetailPanel.add(jPanel5);
```

```
jPanel11.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel11.setText("Alamat");
```

```
jPanel11.add(jLabel11);
```

```
field_alamat.setEditable(false);
```

```
field_alamat.setText("Pilih baris data");
```

```
jPanel11.add(field_alamat);
```

```
dataDetailPanel.add(jPanel11);
```

```
jPanel8.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel12.setText("Jenis Kelamin");
```

```
jPanel8.add(jLabel12);
```



```
field_jk.setEditable(false);
field_jk.setText("Pilih baris data");
jPanel8.add(field_jk);

dataDetailPanel.add(jPanel8);

jPanel9.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel13.setText("Kota");
jPanel9.add(jLabel13);

field_kota.setEditable(false);
field_kota.setText("Pilih baris data");
jPanel9.add(field_kota);

dataDetailPanel.add(jPanel9);

jPanel10.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel14.setText("Tanggal Lahir");
jPanel10.add(jLabel14);

field_tgl_lahir.setEditable(false);
field_tgl_lahir.setText("Pilih baris data");
jPanel10.add(field_tgl_lahir);

dataDetailPanel.add(jPanel10);

jPanel12.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel15.setText("Telepon");
```

```
jPanel12.add(jLabel15);
```

```
field_telepon.setEditable(false);
```

```
field_telepon.setText("Pilih baris data");
```

```
jPanel12.add(field_telepon);
```

```
dataDetailPanel.add(jPanel12);
```

```
jPanel13.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel16.setText("No. HP");
```

```
jPanel13.add(jLabel16);
```

```
field_no_hp.setEditable(false);
```

```
field_no_hp.setText("Pilih baris data");
```

```
jPanel13.add(field_no_hp);
```

```
dataDetailPanel.add(jPanel13);
```

```
jPanel14.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel17.setText("Email");
```

```
jPanel14.add(jLabel17);
```

```
field_email.setEditable(false);
```

```
field_email.setText("Pilih baris data");
```

```
jPanel14.add(field_email);
```

```
dataDetailPanel.add(jPanel14);
```

```
javax.swing.GroupLayout jPanel6Layout = new javax.swing.GroupLayout(jPanel6);
```

```

jPanel6.setLayout(jPanel6Layout);

jPanel6Layout.setHorizontalGroup(
    jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel6Layout.createSequentialGroup()
            .addContainerGap()

.addGroup(jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(dataDetailPanel, javax.swing.GroupLayout.DEFAULT_SIZE, 567,
Short.MAX_VALUE)
            .addComponent(dataDetailPanel2, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
            .addContainerGap())
    );

jPanel6Layout.setVerticalGroup(
    jPanel6Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel6Layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(dataDetailPanel, javax.swing.GroupLayout.PREFERRED_SIZE, 209,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(18, 18, 18)
            .addComponent(dataDetailPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap(101, Short.MAX_VALUE))
    );

jScrollPane1.setViewportViewView(jPanel6);

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addContainerGap()

```

```

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(viewScrollPane)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addComponent(firstPaginationButton)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(previousPaginationButton)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(paginationComboBox, javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(nextPaginationButton)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(lastPaginationButton)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(positionPaginationLabel)
        .addGap(0, 0, Short.MAX_VALUE))
    .addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 606,
Short.MAX_VALUE))
.addContainerGap()
);

jPanel1Layout.setVerticalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
            .addComponent(viewScrollPane, javax.swing.GroupLayout.PREFERRED_SIZE, 124,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(positionPaginationLabel, javax.swing.GroupLayout.PREFERRED_SIZE, 23,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addComponent(lastPaginationButton)

```

```

        .addComponent(nextPaginationButton)

        .addComponent(paginationComboBox, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(firstPaginationButton)

        .addComponent(previousPaginationButton))

        .addGap(18, 18, 18)

        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 311,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addContainerGap(178, Short.MAX_VALUE))
);

```

```

pencarianField.setToolTipText("Kotak Pencarian");

```

```

pencarianField.setBorder(javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFac
tory.createBevelBorder(javax.swing.border.BevelBorder.LOWERED, java.awt.Color.white,
java.awt.Color.white, java.awt.Color.white, java.awt.Color.lightGray),
javax.swing.BorderFactory.createCompoundBorder(javax.swing.BorderFactory.createEmptyBorder(0
, 5, 0, 5), javax.swing.BorderFactory.createMatteBorder(0, 0, 0, 16, new
javax.swing.ImageIcon("C:\\Users\\ASEP\\Downloads\\1498141047_icon-111-search.png")))); //
NOI18N

```

```

pencarianField.setMargin(new java.awt.Insets(0, 0, 0, 0));

```

```

pencarianField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        pencarianFieldActionPerformed(evt);
    }
});

```

```

jLabel2.setText("Pencarian :");

```

```

tutupPenyewaanButton.setText("Tutup Penyewaan");

```

```

tutupPenyewaanButton.setEnabled(false);

```

```

tutupPenyewaanButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        tutupPenyewaanButtonActionPerformed(evt);
    }
});

```

```

    }
    });

    hapusButton.setText("Hapus");
    hapusButton.setEnabled(false);
    hapusButton.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            hapusButtonActionPerformed(evt);
        }
    });

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
    this.setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addGroup(layout.createSequentialGroup()
                .addComponent(jLabel1)
                .addGap(0, 0, Short.MAX_VALUE)
                .addComponent(jLabel2)
                .addGap(0, 0, Short.MAX_VALUE)
                .addComponent(tutupPenyewaanButton)
            )
    );

```

```

        .addComponent(hapusButton, javax.swing.GroupLayout.PREFERRED_SIZE, 79,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap())
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
            .addComponent(jLabel1)
            .addGap(30, 30, 30)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(pencarianField, javax.swing.GroupLayout.PREFERRED_SIZE, 20,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(tutupPenyewaanButton)
                .addComponent(hapusButton))
            .addGap(29, 29, 29)
            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
    );
} // </editor-fold> // GEN-END: initComponents

```

```

private void firstPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_firstPaginationButtonActionPerformed

```

```

    // TODO add your handling code here:

```

```

    int newOffset = pagination.jumpToFirst();
    pagination.GUIComponent.update();

```

```

    penyewaanModel.sql.select.offset(newOffset);
    ResultSet rs = penyewaanModel.sql.select.execute();
    penyewaanModel.save(rs);
    penyewaanModel.sql.getConnection().close(rs);

```

```

        updateTable();
    } //GEN-LAST:event_firstPaginationButtonActionPerformed

    private void previousPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_previousPaginationButtonActionPerformed
        // TODO add your handling code here:

        int newOffset = pagination.movePrevious();

        pagination.GUIComponent.update();

        penyewaanModel.sql.select.offset(newOffset);

        ResultSet rs = penyewaanModel.sql.select.execute();

        penyewaanModel.save(rs);

        penyewaanModel.sql.getConnection().close(rs);

        updateTable();
    } //GEN-LAST:event_previousPaginationButtonActionPerformed

    private void paginationComboBoxItemStateChanged(java.awt.event.ItemEvent evt) { //GEN-FIRST:event_paginationComboBoxItemStateChanged
        // TODO add your handling code here:

        if (evt.getStateChange() == ItemEvent.DESELECTED &&
            pagination.GUIComponent.getComboBoxStatus() ==
            PaginationGUIComponent.COMBOBOX_ACCEPT_ANY_ACTION)
        {
            System.out.println("Posisi " + "paginationComboBox");

            int selectedPage = Integer.valueOf(paginationComboBox
                .getSelectedItem()
                .toString());

```



```

        int newOffset = pagination.jumpTo(selectedPage);
        pagination.GUIComponent.update();

        penyewaanModel.sql.select.offset(newOffset);
        ResultSet rs = penyewaanModel.sql.select.execute();
        penyewaanModel.save(rs);
        penyewaanModel.sql.getConnection().close(rs);

        updateTable();

    }
} //GEN-LAST:event_paginationComboBoxItemStateChanged

private void paginationComboBoxActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_paginationComboBoxActionPerformed
    // TODO add your handling code here:

} //GEN-LAST:event_paginationComboBoxActionPerformed

private void nextPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_nextPaginationButtonActionPerformed
    // TODO add your handling code here:

    int newOffset = pagination.moveNext();
    pagination.GUIComponent.update();

    penyewaanModel.sql.select.offset(newOffset);
    ResultSet rs = penyewaanModel.sql.select.execute();
    penyewaanModel.save(rs);
    penyewaanModel.sql.getConnection().close(rs);

    updateTable();
} //GEN-LAST:event_nextPaginationButtonActionPerformed

```

```
private void lastPaginationButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_lastPaginationButtonActionPerformed
```

```
    // TODO add your handling code here:
```

```
    int newOffset = pagination.jumpToLast();
```

```
    pagination.GUIComponent.update();
```

```
    penyewaanModel.sql.select.offset(newOffset);
```

```
    ResultSet rs = penyewaanModel.sql.select.execute();
```

```
    penyewaanModel.save(rs);
```

```
    penyewaanModel.sql.getConnection().close(rs);
```

```
    updateTable();
```

```
} //GEN-LAST:event_lastPaginationButtonActionPerformed
```

```
/**
```

```
 * Fill in data detail pelanggan from specific pelanggan
```

```
 */
```

```
private void showDataDetailOfPelanggan(int selectedRow) {
```

```
    String noKTP = "";
```

```
    String nama = "";
```

```
    String tanggalLahir = "";
```

```
    String pekerjaan = "";
```

```
    String alamat = "";
```

```
    String jenisKelamin = "";
```

```
    int idKota = 0;
```

```
    String telepon = "";
```

```
    String handphone = "";
```

```
    String email = "";
```

```
    int row = selectedRow;
```

```

noKTP = viewTable.getValueAt(row, 2).toString();

pelangganModel.sql.select.reset();
pelangganModel.sql.select.where("noKTP", "=", noKTP);
ResultSet rs = pelangganModel.sql.select.execute();
try {
    if (rs.next() == false) return;

    nama = rs.getString("nama");
    tanggalLahir = rs.getString("tanggalLahir");
    pekerjaan = rs.getString("pekerjaan");
    alamat = rs.getString("alamat");
    jenisKelamin = rs.getString("jenisKelamin");
    idKota = rs.getInt("idKota");
    telepon = rs.getString("telepon");
    handphone = rs.getString("handphone");
    email = rs.getString("email");
} catch (SQLException e) {

}

mobilModel.sql.getConnection().close(rs);

/* get nama kota from id kota */
String namaKota = kotaModel.getNamaKotaById(idKota);
/* get jenis kelamin */
int jenkel = Integer.parseInt(jenisKelamin);

field_no_ktp.setText(noKTP);
field_nama.setText(nama);
if (jenkel == PelangganTableModel.PEREMPUAN) {
    field_jk.setText("Perempuan");
}

```

```

}else{
    field_jk.setText("Laki-laki");
}

field_tgl_lahir.setText(tanggalLahir);
field_pekerjaan.setText(pekerjaan);
field_alamat.setText(alamat);
field_kota.setText(namaKota);
field_telepon.setText(telepon);
field_email.setText(email);
field_no_hp.setText(handphone);
}

/**
 * Fill in data detail pelanggan from specific pelanggan
 */
private void showDataDetailOfMobil(int selectedRow) {
    String noPolisi = "";
    String merk = "";
    String warna = "";
    String tahun = "";
    String hargaSewa12Jam = "";
    String hargaSewa24Jam = "";
    String dendaPerJam = "";
    String status = "";

    int row = selectedRow;
    noPolisi = viewTable.getValueAt(row, 1).toString();

    mobilModel.sql.select.reset();
    mobilModel.sql.select.where("noPolisi", "=", noPolisi);
    ResultSet rs = mobilModel.sql.select.execute();

```

```

try {
    if (rs.next() == false) return;

    merk = rs.getString("merk");
    warna = rs.getString("warna");
    tahun = rs.getString("tahun");
    hargaSewa12Jam = rs.getString("hargaSewa12Jam");
    hargaSewa24Jam = rs.getString("hargaSewa24Jam");
    dendaPerJam = rs.getString("dendaPerJam");
    status = rs.getString("status");
} catch (SQLException e) {

}

mobilModel.sql.getConnection().close(rs);

noPolisiField.setText(noPolisi);
merkField.setText(merk);
warnaField.setText(warna);
tahunField.setText(tahun);
hargaSewa12JamField.setText(hargaSewa12Jam);
hargaSewa24JamField.setText(hargaSewa24Jam);
dendaPerJamField.setText(dendaPerJam);
statusField.setText(
    Integer.valueOf(status) == MobilTableModel.STATUS_TERSEDIA
    ? "Tersedia" : "Tidak Tersedia"
);
}

private void viewTableMouseClicked(java.awt.event.MouseEvent evt) { //GEN-
FIRST:event_viewTableMouseClicked

    int row = viewTable.getSelectedRow();

```

```

if (row != -1) {
    showDataDetailOfPelanggan(row);
    showDataDetailOfMobil(row);
    tutupPenyewaanButton.setEnabled(true);
    hapusButton.setEnabled(true);
}
}

//GEN-LAST:event_viewTableMouseClicked

private void field_no_ktpActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_field_no_ktpActionPerformed
    // TODO add your handling code here:
}

//GEN-LAST:event_field_no_ktpActionPerformed

private void pencarianFieldActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_pencarianFieldActionPerformed
    // TODO add your handling code here:
    String searchText = pencarianField.getText();

    // reset where clause
    String sign = "USER SEARCH";
    penyewaanModel.sql.select.removeWhereBySegmentSign(sign);

    penyewaanModel.sql.select.whereSegmentStart(sign);
    penyewaanModel.sql.select.where("idSewa", "LIKE", "%" + searchText + "%");
    penyewaanModel.sql.select.orWhere("noKTP", "LIKE", "%" + searchText + "%");
    penyewaanModel.sql.select.whereSegmentEnd(sign);

    int newOffset = pagination.isSQLChanged.updatePagination();
    pagination.isSQLChanged.GUIComponent.reinitComboBox();
    pagination.GUIComponent.update();

    penyewaanModel.sql.select.offset(newOffset);

```

```

        ResultSet rs = penyewaanModel.sql.select.execute();

        penyewaanModel.save(rs);

        penyewaanModel.sql.getConnection().close(rs);

        updateTable();
    } //GEN-LAST:event_pencarianFieldActionPerformed

    private void tutupPenyewaanButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_tutupPenyewaanButtonActionPerformed

        int row = viewTable.getSelectedRow();

        int idSewa = Integer.valueOf(viewTable.getValueAt(row, 0).toString());

        javax.swing.JPanel en = new belajardatabase.penyewaan.Pengembalian(frame, idSewa);

        frame.setContentPane(en);

        SwingUtilities.updateComponentTreeUI(frame.getContentPane());
    } //GEN-LAST:event_tutupPenyewaanButtonActionPerformed

    private void hapusButtonActionPerformed(java.awt.event.ActionEvent evt) { //GEN-FIRST:event_hapusButtonActionPerformed

        int row = viewTable.getSelectedRow();

        int idSewa = Integer.valueOf(penyewaanModel.getValueAt(row, 0).toString());

        int response = JOptionPane.showConfirmDialog(frame,

            "Apakah anda ingin menghapus penyewaan (id sewa: " + idSewa + ") ini?",

            "Penghapusan Data",

            JOptionPane.YES_NO_OPTION,

            JOptionPane.WARNING_MESSAGE

        );

        if (response == JOptionPane.YES_OPTION) {

            Delete.delete(idSewa, frame); // lakukan penghapusan

```

```

        // update table and pagination
        int newOffset = pagination.updatePagination();
        pagination.GUIComponent.reinitComboBox();
        pagination.GUIComponent.update();

        penyewaanModel.sql.select.offset(newOffset);
        ResultSet rs = penyewaanModel.sql.select.execute();
        penyewaanModel.save(rs);
        penyewaanModel.sql.getConnection().close(rs);
        updateTable();
    }
}

//GEN-LAST:event_hapusButtonActionPerformed

public String quotate(String content) {
    return "\"" + content + "\"";
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JPanel dataDetailPanel;
private javax.swing.JPanel dataDetailPanel2;
private javax.swing.JTextField dendaPerJamField;
private javax.swing.JTextField field_alamat;
private javax.swing.JTextField field_email;
private javax.swing.JTextField field_jk;
private javax.swing.JTextField field_kota;
private javax.swing.JTextField field_nama;
private javax.swing.JTextField field_no_hp;
private javax.swing.JTextField field_no_ktp;
private javax.swing.JTextField field_pekerjaan;
private javax.swing.JTextField field_telepon;

```



```
private javax.swing.JTextField field_tgl_lahir;
private javax.swing.JButton firstPaginationButton;
private javax.swing.JButton hapusButton;
private javax.swing.JTextField hargaSewa12JamField;
private javax.swing.JTextField hargaSewa24JamField;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel13;
private javax.swing.JLabel jLabel14;
private javax.swing.JLabel jLabel15;
private javax.swing.JLabel jLabel16;
private javax.swing.JLabel jLabel17;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel28;
private javax.swing.JLabel jLabel29;
private javax.swing.JLabel jLabel30;
private javax.swing.JLabel jLabel31;
private javax.swing.JLabel jLabel32;
private javax.swing.JLabel jLabel33;
private javax.swing.JLabel jLabel34;
private javax.swing.JLabel jLabel35;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel10;
private javax.swing.JPanel jPanel11;
private javax.swing.JPanel jPanel12;
private javax.swing.JPanel jPanel13;
private javax.swing.JPanel jPanel14;
```

```

private javax.swing.JPanel jPanel2;
private javax.swing.JPanel jPanel23;
private javax.swing.JPanel jPanel24;
private javax.swing.JPanel jPanel25;
private javax.swing.JPanel jPanel26;
private javax.swing.JPanel jPanel27;
private javax.swing.JPanel jPanel28;
private javax.swing.JPanel jPanel29;
private javax.swing.JPanel jPanel3;
private javax.swing.JPanel jPanel4;
private javax.swing.JPanel jPanel5;
private javax.swing.JPanel jPanel6;
private javax.swing.JPanel jPanel8;
private javax.swing.JPanel jPanel9;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JButton lastPaginationButton;
private javax.swing.JTextField merkField;
private javax.swing.JButton nextPaginationButton;
private javax.swing.JTextField noPolisiField;
private javax.swing.JComboBox paginationComboBox;
private javax.swing.JTextField pencarianField;
private javax.swing.JLabel positionPaginationLabel;
private javax.swing.JButton previousPaginationButton;
private javax.swing.JTextField statusField;
private javax.swing.JTextField tahunField;
private javax.swing.JButton tutupPenyewaanButton;
private javax.swing.JScrollPane viewScrollPane;
private javax.swing.JTable viewTable;
private javax.swing.JTextField warnaField;
// End of variables declaration//GEN-END:variables
}

```

```

./penyewaan/PengembalianDanBayar.java
/*
 * 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 belajardatabase.penyewaan;

import belajardatabase.model.MobilTableModel;
import belajardatabase.model.PenyewaanTableModel;
import java.sql.ResultSet;
import static belajardatabase.utilities.DateUtility.*;
import javax.swing.JOptionPane;
import javax.swing.SwingUtilities;

/**
 * Hanya akan dipanggil oleh pengembalian.java
 * @author ASEP
 */
public class PengembalianDanBayar extends javax.swing.JPanel {

    PenyewaanTableModel penyewaanModel = null;

    MobilTableModel mobilModel = null;

    javax.swing.JFrame frame = null;

    private int idSewa = -1;

    private String tanggalKembali = "";

    // akan terisi bila hitungBiaya() dipanggil dan digunakan oleh tuntasButton

    private int subtotal = -1;

    private int kenaDenda = -1;

```

```

/**
 * Creates new form pengembalianDanBayar
 */
public PengembalianDanBayar(
    javax.swing.JFrame frame,
    int idSewa,
    String tanggalKembali
) {
    this.frame = frame;
    this.idSewa = idSewa;
    this.tanggalKembali = tanggalKembali;

    initComponents();
    initModel();

    try {
        init(idSewa);
        hitungBiaya(tanggalKembali);
    } catch (Exception e) {
        System.out.println("Error inside `pengembalianDanBayar` : "
            + e.getMessage());
    }
}

public void initModel() {
    penyewaanModel = new PenyewaanTableModel();
    mobilModel = new MobilTableModel();
}

public void init(int idSewa) throws Exception {

```

```

// init penyewaan
penyewaanModel.sql.select.where("idSewa", "=", idSewa);
ResultSet rs = penyewaanModel.sql.select.execute();
penyewaanModel.save(rs);
penyewaanModel.sql.getConnection().close(rs);

if (penyewaanModel.getRowCount() != 1) {
    throw new Exception("ERROR: sewa dengan id "
        + idSewa + " tidak ditemukan");
}

// init mobil
String noPolisi = penyewaanModel.getValueAt(0, 1).toString();
mobilModel.sql.select.where("noPolisi", "=", noPolisi);
rs = mobilModel.sql.select.execute();
mobilModel.save(rs);
mobilModel.sql.getConnection().close(rs);
}

/**
 * Hitung biaya dan tampilkan ke form
 *
 * @param tanggalKembali
 */
public void hitungBiaya(String tanggalKembali) {
    int hargaSewa24Jam = Integer.valueOf(mobilModel.getValueAt(0, 3).toString());
    int hargaDenda = Integer.valueOf(mobilModel.getValueAt(0, 6).toString());
    String tanggalSewa = penyewaanModel.getValueAt(0, 3).toString();
    String batasKembali = penyewaanModel.getValueAt(0, 4).toString();

    subtotal = hitungSubTotal(batasKembali, tanggalSewa, hargaSewa24Jam);
}

```

```

        kenaDenda = hitungDenda(batasKembali, tanggalKembali, hargaSewa24Jam, hargaDenda);
        int total = subtotal + kenaDenda;

        subTotalLabel.setText("Rp." + subtotal);
        dendaLabel.setText("Rp." + kenaDenda);
        totalBayarLabel.setText("Rp." + total);
    }

    /**
     *
     * @param batasKembali
     * @param tanggalSewa
     * @param hargaSewa24Jam
     * @return
     */
    public int hitungSubTotal(
        String batasKembali,
        String tanggalSewa,
        int hargaSewa24Jam
    ){
        int lamaSewaNormal = getDifferenceBetweenTwoDate(batasKembali,
            tanggalSewa, "dd-MM-yyyy");
        System.out.println("sewaNormal = " + lamaSewaNormal);

        return lamaSewaNormal * hargaSewa24Jam;
    }

    /**
     * Perhitungan denda:
     * 1 hari telat maka: kenaDenda = 1 * denda
     * 2 hari telat maka: kenaDenda = 1 * denda + (1 * harga sewa normal)

```

```

*   3 hari telat maka: kenaDenda = 1 * denda + (2 * harga sewa normal)
*   4 hari telat maka: kenaDenda = 1 * denda + (3 * harga sewa normal)
*/

public int hitungDenda(
    String batasKembali,
    String tanggalKembali,
    int hargaSewa24Jam,
    int denda
){
    int kenaDenda = 0;

    // jumlah hari yang melebihi tanggal batas pengembalian
    int hari = getDifferenceBetweenTwoDate(tanggalKembali,
        batasKembali, "dd-MM-yyyy");

    if (hari > 0) {
        kenaDenda += denda;
        hari = hari - 1;

        if (hari > 0) kenaDenda += hari * hargaSewa24Jam;
    }

    return kenaDenda;
}

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN: initComponents

```

```

private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jSeparator1 = new javax.swing.JSeparator();
    jPanel1 = new javax.swing.JPanel();
    jLabel2 = new javax.swing.JLabel();
    subTotalLabel = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    dendaLabel = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    totalBayarLabel = new javax.swing.JLabel();
    tuntasButton = new javax.swing.JButton();
    jSeparator2 = new javax.swing.JSeparator();

    setMaximumSize(new java.awt.Dimension(626, 666));
    setMinimumSize(new java.awt.Dimension(626, 666));

    jLabel1.setText("INFORMASI BIAYA");

    jPanel1.setLayout(new java.awt.GridLayout(2, 2, 20, 10));

    jLabel2.setText("Subtotal");
    jPanel1.add(jLabel2);

    subTotalLabel.setText("Rp.0");
    jPanel1.add(subTotalLabel);

    jLabel3.setText("Denda");
    jPanel1.add(jLabel3);

    dendaLabel.setText("Rp.0");

```



```

jPanel1.add(dendaLabel);

jLabel6.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
jLabel6.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel6.setText("TOTAL BAYAR");

totalBayarLabel.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
totalBayarLabel.setForeground(new java.awt.Color(255, 51, 51));
totalBayarLabel.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
totalBayarLabel.setText("Rp.0000000");

tuntasButton.setText("SEWA TUNTAS");
tuntasButton.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        tuntasButtonActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);
this.setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jSeparator1)
            .addContainerGap())
        .addGroup(layout.createSequentialGroup()
            .addComponent(jLabel6)
            .addGap(15, 15, 15)
            .addComponent(totalBayarLabel)
            .addContainerGap())
        .addGroup(layout.createSequentialGroup()
            .addComponent(tuntasButton)
            .addGap(15, 15, 15)
            .addComponent(tuntasLabel)
            .addContainerGap())
);

```

```

        .addComponent(jLabel1)

        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, 230,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addGap(0, 0, Short.MAX_VALUE))

        .addComponent(totalBayarLabel, javax.swing.GroupLayout.Alignment.LEADING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)

        .addComponent(jSeparator2))

        .addContainerGap())

    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup())

        .addContainerGap(264, Short.MAX_VALUE)

        .addComponent(tuntasButton)

        .addGap(259, 259, 259))

);

layout.setVerticalGroup(

    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(layout.createSequentialGroup())

            .addGap(28, 28, 28)

            .addComponent(jLabel1)

            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

            .addComponent(jSeparator1, javax.swing.GroupLayout.PREFERRED_SIZE, 10,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(27, 27, 27)

            .addComponent(jSeparator2, javax.swing.GroupLayout.PREFERRED_SIZE, 12,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(18, 18, 18)

            .addComponent(jLabel6)

            .addGap(30, 30, 30)

            .addComponent(totalBayarLabel)

            .addGap(34, 34, 34)

```

```

        .addComponent(tuntasButton, javax.swing.GroupLayout.PREFERRED_SIZE, 35,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addContainerGap(364, Short.MAX_VALUE))

    );

} // </editor-fold> // GEN-END: initComponents

```

```

private void tuntasButtonActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_tuntasButtonActionPerformed

```

```

    String tglKembaliMysqlDate = convertToMysqlDate(
        tanggalKembali, "dd-MM-yyyy"
    );

```

```

    penyewaanModel.sql.update.where("idSewa", idSewa);
    penyewaanModel.sql.update.set("tanggalKembali", tglKembaliMysqlDate);
    penyewaanModel.sql.update.set("subTotal", subtotal);
    penyewaanModel.sql.update.set("denda", kenaDenda);
    boolean success1 = penyewaanModel.sql.update.execute();

```

```

    String noPolisi = mobilModel.getValueAt(0, 0).toString();
    mobilModel.sql.update.where("noPolisi", noPolisi);
    mobilModel.sql.update.set("status", MobilTableModel.STATUS_TERSEDIA);
    boolean success2 = mobilModel.sql.update.execute();

```

```

    if (success2 == false) System.out.println("Error: success2 gagal");

```

```

    String pesan = "Gagal menyimpan";
    if (success1) pesan = "Berhasil menyimpan";

```

```

    JOptionPane.showMessageDialog(frame, pesan);

```

```

    tuntasButton.setVisible(! success1);

} // GEN-LAST:event_tuntasButtonActionPerformed

```

```

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JLabel dendaLabel;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel6;
private javax.swing.JPanel jPanel1;
private javax.swing.JSeparator jSeparator1;
private javax.swing.JSeparator jSeparator2;
private javax.swing.JLabel subTotalLabel;
private javax.swing.JLabel totalBayarLabel;
private javax.swing.JButton tuntasButton;
// End of variables declaration//GEN-END:variables
}

./penyewaan/Delete.java

/*
 * 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 belajardatabase.penyewaan;

import belajardatabase.model.MobilTableModel;
import belajardatabase.model.PenyewaanTableModel;
import java.sql.ResultSet;
import javax.swing.JOptionPane;

/**

```

```

*
* @author ASEP
*/
public class Delete {
    public static void delete(int idSewa, javax.swing.JFrame frame) {
        PenyewaanTableModel model = new PenyewaanTableModel();

        model.sql.select.where("idSewa", "=", idSewa);
        ResultSet rs = model.sql.select.execute();
        model.save(rs);
        model.sql.getConnection().close(rs);

        model.sql.delete.where("idSewa", idSewa);
        boolean success = model.sql.delete.execute();

        if (success) {
            String noPolisi = model.getValueAt(0, 1).toString();
            makeMobilTersedia(noPolisi);

            JOptionPane.showMessageDialog(
                frame,
                "Berhasil menghapus data penyewaan"
            );
        } else {
            JOptionPane.showMessageDialog(
                frame,
                "Gagal menghapus data penyewaan",
                "Penghapusan",
                JOptionPane.ERROR_MESSAGE
            );
        }
    }
}

```

```
}
```

```
public static void makeMobilTersedia(String noPolisi) {  
    MobilTableModel model = new MobilTableModel();  
  
    model.sql.update.where("noPolisi", noPolisi);  
    model.sql.update.set("status", MobilTableModel.STATUS_TERSEDIA);  
    model.sql.update.execute();  
}  
}
```

```
./penyewaan/Pengembalian.java
```

```
/*
```

```
* 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 belajardatabase.penyewaan;
```

```
import belajardatabase.model.KotaTableModel;  
import belajardatabase.model.MobilTableModel;  
import belajardatabase.model.PelangganTableModel;  
import belajardatabase.model.PenyewaanTableModel;  
import static belajardatabase.utilities.DateUtility.*;  
import java.sql.ResultSet;  
import java.text.ParseException;  
import javax.swing.SwingUtilities;
```

```
/**
```

```
*
```

```

* @author ASEP
*/

public class Pengembalian extends javax.swing.JPanel {

    MobilTableModel mobilModel = null;

    PelangganTableModel pelangganModel = null;

    PenyewaanTableModel penyewaanModel = null;


    javax.swing.JFrame frame = null;

    private int idSewa = -1;


    /**
     * Creates new form pengembalian
     */
    public Pengembalian(javax.swing.JFrame frame, int idSewa) {

        this.frame = frame;

        this.idSewa = idSewa;


        initComponents();

        initModel();

        try {

            init();

            initDataDetailMobil();

            initDataDetailPelanggan();

            initDataDetailPenyewaan();

        } catch (Exception e) {

            System.out.println("Error inside `pengembalian` : "

                + e.getMessage());

        }

    }


    public void initModel() {

```

```

mobilModel = new MobilTableModel();
pelangganModel = new PelangganTableModel();
penyewaanModel = new PenyewaanTableModel();
}

public void init() throws Exception {
    ResultSet rs = null;

    // init penyewaan
    penyewaanModel.sql.select.where("idSewa", "=", idSewa);
    rs = penyewaanModel.sql.select.execute();
    penyewaanModel.save(rs);
    penyewaanModel.sql.getConnection().close(rs);

    if (penyewaanModel.getRowCount() != 1) {
        throw new Exception("ERROR: sewa dengan id "
            + idSewa + " tidak ditemukan");
    }

    // init mobil
    String noPolisi = penyewaanModel.getValueAt(0, 1).toString();
    mobilModel.sql.select.where("noPolisi", "=", noPolisi);
    rs = mobilModel.sql.select.execute();
    mobilModel.save(rs);
    mobilModel.sql.getConnection().close(rs);

    // init pelanggan
    String noKTP = penyewaanModel.getValueAt(0, 2).toString();
    pelangganModel.sql.select.where("noKTP", "=", noKTP);
    rs = pelangganModel.sql.select.execute();
    pelangganModel.save(rs);
}

```



```

        pelangganModel.sql.getConnection().close(rs);
    }

    public void initDataDetailMobil() {
        String noPolisi = mobilModel.getValueAt(0, 0).toString();
        String merk = mobilModel.getValueAt(0, 1).toString();
        String warna = mobilModel.getValueAt(0, 4).toString();
        String tahun = mobilModel.getValueAt(0, 5).toString();
        String hargaSewa12Jam = mobilModel.getValueAt(0, 2).toString();
        String hargaSewa24Jam = mobilModel.getValueAt(0, 3).toString();
        String dendaPerJam = mobilModel.getValueAt(0, 6).toString();
        String status = mobilModel.getValueAt(0, 7).toString();

        noPolisiField.setText(noPolisi);
        merkField.setText(merk);
        warnaField.setText(warna);
        tahunField.setText(tahun);
        hargaSewa12JamField.setText(hargaSewa12Jam);
        hargaSewa24JamField.setText(hargaSewa24Jam);
        dendaPerJamField.setText(dendaPerJam);
    }

    public void initDataDetailPelanggan() {
        String noKTP = pelangganModel.getValueAt(0, 0).toString();
        String nama = pelangganModel.getValueAt(0, 1).toString();
        String tanggalLahir = pelangganModel.getValueAt(0, 2).toString();
        String pekerjaan = pelangganModel.getValueAt(0, 3).toString();
        String alamat = pelangganModel.getValueAt(0, 4).toString();
        String jenisKelamin = pelangganModel.getValueAt(0, 5).toString();
        String idKota = pelangganModel.getValueAt(0, 6).toString();
        String telepon = pelangganModel.getValueAt(0, 7).toString();
    }

```

```

String handphone = pelangganModel.getValueAt(0, 8).toString();
String email = pelangganModel.getValueAt(0, 9).toString();

int jenkel = Integer.valueOf(jenisKelamin);
KotaTableModel kotaModel = new KotaTableModel();
String namaKota = kotaModel.getNamaKotaById(
    Integer.valueOf(idKota)
);

noKTPField.setText(noKTP);
namaField.setText(nama);
if (jenkel == PelangganTableModel.PRIA) {
    jenisKelaminField.setText("Laki-laki");
} else {
    jenisKelaminField.setText("Perempuan");
}

tanggalLahirField.setText(tanggalLahir);
pekerjaanField.setText(pekerjaan);
alamatField.setText(alamat);
kotaField.setText(namaKota);
teleponField.setText(telepon);
noHPField.setText(handphone);
emailField.setText(email);
}

public void initDataDetailPenyewaan() {
    String tanggalSewa = penyewaanModel.getValueAt(0, 3).toString();
    String batasKembali = penyewaanModel.getValueAt(0, 4).toString();

    String tanggalSewaHari = getDayFromDateString(tanggalSewa, "dd-MM-yyyy");
    String tanggalSewaBulan = getMonthFromDateString(tanggalSewa, "dd-MM-yyyy");

```

```

String tanggalSewaTahun = getYearFromDateString(tanggalSewa, "dd-MM-yyyy");
tglSewaHariField.setText(tanggalSewaHari);
tglSewaBulanField.setText(tanggalSewaBulan);
tglSewaTahunField.setText(tanggalSewaTahun);

String batasKembaliHari = getDayFromDateString(batasKembali, "dd-MM-yyyy");
String batasKembaliBulan = getMonthFromDateString(batasKembali, "dd-MM-yyyy");
String batasKembaliTahun = getYearFromDateString(batasKembali, "dd-MM-yyyy");
tglBatasKembaliHariField.setText(batasKembaliHari);
tglBatasKembaliBulanField.setText(batasKembaliBulan);
tglBatasKembaliTahunField.setText(batasKembaliTahun);
}

/**
 * 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.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-BEGIN:initComponents
private void initComponents() {

    jPanel1 = new javax.swing.JPanel();
    jLabel3 = new javax.swing.JLabel();
    jPanel6 = new javax.swing.JPanel();
    tglSewaHariField = new javax.swing.JTextField();
    tglSewaBulanField = new javax.swing.JTextField();
    tglSewaTahunField = new javax.swing.JTextField();
    jLabel2 = new javax.swing.JLabel();
    jPanel7 = new javax.swing.JPanel();
    tglBatasKembaliHariField = new javax.swing.JTextField();

```

```
tglBatasKembaliBulanField = new javax.swing.JTextField();
tglBatasKembaliTahunField = new javax.swing.JTextField();
dataDetailPanel2 = new javax.swing.JPanel();
jPanel23 = new javax.swing.JPanel();
jLabel22 = new javax.swing.JLabel();
noKTPField = new javax.swing.JTextField();
jPanel24 = new javax.swing.JPanel();
jLabel23 = new javax.swing.JLabel();
pekerjaanField = new javax.swing.JTextField();
jPanel25 = new javax.swing.JPanel();
jLabel24 = new javax.swing.JLabel();
namaField = new javax.swing.JTextField();
jPanel26 = new javax.swing.JPanel();
jLabel25 = new javax.swing.JLabel();
alamatField = new javax.swing.JTextField();
jPanel27 = new javax.swing.JPanel();
jLabel26 = new javax.swing.JLabel();
jenisKelaminField = new javax.swing.JTextField();
jPanel28 = new javax.swing.JPanel();
jLabel13 = new javax.swing.JLabel();
kotaField = new javax.swing.JTextField();
jPanel29 = new javax.swing.JPanel();
jLabel27 = new javax.swing.JLabel();
tanggalLahirField = new javax.swing.JTextField();
jPanel30 = new javax.swing.JPanel();
jLabel15 = new javax.swing.JLabel();
teleponField = new javax.swing.JTextField();
jPanel31 = new javax.swing.JPanel();
jLabel28 = new javax.swing.JLabel();
noHPField = new javax.swing.JTextField();
jPanel32 = new javax.swing.JPanel();
```

```
jLabel17 = new javax.swing.JLabel();
emailField = new javax.swing.JTextField();
dataDetailPanel = new javax.swing.JPanel();
jPanel4 = new javax.swing.JPanel();
jLabel8 = new javax.swing.JLabel();
noPolisiField = new javax.swing.JTextField();
jPanel3 = new javax.swing.JPanel();
jLabel9 = new javax.swing.JLabel();
hargaSewa24JamField = new javax.swing.JTextField();
jPanel5 = new javax.swing.JPanel();
jLabel10 = new javax.swing.JLabel();
merkField = new javax.swing.JTextField();
jPanel11 = new javax.swing.JPanel();
jLabel16 = new javax.swing.JLabel();
hargaSewa12JamField = new javax.swing.JTextField();
jPanel8 = new javax.swing.JPanel();
jLabel12 = new javax.swing.JLabel();
warnaField = new javax.swing.JTextField();
jPanel9 = new javax.swing.JPanel();
jLabel11 = new javax.swing.JLabel();
dendaPerJamField = new javax.swing.JTextField();
jPanel10 = new javax.swing.JPanel();
jLabel14 = new javax.swing.JLabel();
tahunField = new javax.swing.JTextField();
jPanel12 = new javax.swing.JPanel();
jLabel1 = new javax.swing.JLabel();
tglKembaliHariField = new javax.swing.JTextField();
tglKembaliBulanField = new javax.swing.JTextField();
tglKembaliTahunField = new javax.swing.JTextField();
hitungButton = new javax.swing.JButton();
```

```

setMaximumSize(new java.awt.Dimension(626, 666));
setMinimumSize(new java.awt.Dimension(626, 666));
setPreferredSize(new java.awt.Dimension(626, 666));

jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Penyewaan"));
jPanel1.setLayout(new java.awt.GridLayout(2, 2, 10, 10));

jLabel3.setText("Tanggal Sewa");
jPanel1.add(jLabel3);

jPanel6.setLayout(new java.awt.GridLayout(1, 3, 10, 0));

tglSewaHariField.setEditable(false);
tglSewaHariField.setText("HH");
jPanel6.add(tglSewaHariField);

tglSewaBulanField.setEditable(false);
tglSewaBulanField.setText("MM");
jPanel6.add(tglSewaBulanField);

tglSewaTahunField.setEditable(false);
tglSewaTahunField.setText("YYYY");
jPanel6.add(tglSewaTahunField);

jPanel1.add(jPanel6);

jLabel2.setText("Batas Pengembalian");
jPanel1.add(jLabel2);

jPanel7.setLayout(new java.awt.GridLayout(1, 3, 10, 0));

```

```

tglBatasKembaliHariField.setEditable(false);
tglBatasKembaliHariField.setText("HH");
jPanel7.add(tglBatasKembaliHariField);

tglBatasKembaliBulanField.setEditable(false);
tglBatasKembaliBulanField.setText("MM");
jPanel7.add(tglBatasKembaliBulanField);

tglBatasKembaliTahunField.setEditable(false);
tglBatasKembaliTahunField.setText("YYYY");
jPanel7.add(tglBatasKembaliTahunField);

jPanel1.add(jPanel7);

dataDetailPanel2.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Informasi"));
dataDetailPanel2.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
dataDetailPanel2.setMinimumSize(new java.awt.Dimension(367, 163));
dataDetailPanel2.setLayout(new java.awt.GridLayout(5, 5, 30, 10));

jPanel23.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel22.setText("No. KTP");
jPanel23.add(jLabel22);

noKTPField.setEditable(false);
noKTPField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        noKTPFieldActionPerformed(evt);
    }
});
jPanel23.add(noKTPField);

```

```
dataDetailPanel2.add(jPanel23);
```

```
jPanel24.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel23.setText("Pekerjaan");
```

```
jPanel24.add(jLabel23);
```

```
pekerjaanField.setEditable(false);
```

```
jPanel24.add(pekerjaanField);
```

```
dataDetailPanel2.add(jPanel24);
```

```
jPanel25.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel24.setText("Nama");
```

```
jPanel25.add(jLabel24);
```

```
namaField.setEditable(false);
```

```
jPanel25.add(namaField);
```

```
dataDetailPanel2.add(jPanel25);
```

```
jPanel26.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel25.setText("Alamat");
```

```
jPanel26.add(jLabel25);
```

```
alamatField.setEditable(false);
```

```
jPanel26.add(alamatField);
```



```
dataDetailPanel2.add(jPanel26);
```

```
jPanel27.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel26.setText("Jenis Kelamin");
```

```
jPanel27.add(jLabel26);
```

```
jenisKelaminField.setEditable(false);
```

```
jPanel27.add(jenisKelaminField);
```

```
dataDetailPanel2.add(jPanel27);
```

```
jPanel28.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel13.setText("Kota");
```

```
jPanel28.add(jLabel13);
```

```
kotaField.setEditable(false);
```

```
jPanel28.add(kotaField);
```

```
dataDetailPanel2.add(jPanel28);
```

```
jPanel29.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel27.setText("Tanggal Lahir");
```

```
jPanel29.add(jLabel27);
```

```
tanggalLahirField.setEditable(false);
```

```
jPanel29.add(tanggalLahirField);
```

```
dataDetailPanel2.add(jPanel29);
```

```
jPanel30.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel15.setText("Telepon");
```

```
jPanel30.add(jLabel15);
```

```
teleponField.setEditable(false);
```

```
jPanel30.add(teleponField);
```

```
dataDetailPanel2.add(jPanel30);
```

```
jPanel31.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel28.setText("No. HP");
```

```
jPanel31.add(jLabel28);
```

```
noHPField.setEditable(false);
```

```
jPanel31.add(noHPField);
```

```
dataDetailPanel2.add(jPanel31);
```

```
jPanel32.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel17.setText("Email");
```

```
jPanel32.add(jLabel17);
```

```
emailField.setEditable(false);
```

```
jPanel32.add(emailField);
```

```
dataDetailPanel2.add(jPanel32);
```

```

dataDetailPanel.setBorder(javax.swing.BorderFactory.createTitledBorder("Detail Mobil"));
dataDetailPanel.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
dataDetailPanel.setMinimumSize(new java.awt.Dimension(367, 163));
dataDetailPanel.setLayout(new java.awt.GridLayout(4, 4, 30, 10));

jPanel4.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel8.setText("No. Polisi");
jPanel4.add(jLabel8);

noPolisiField.setEditable(false);
noPolisiField.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        noPolisiFieldActionPerformed(evt);
    }
});
jPanel4.add(noPolisiField);

dataDetailPanel.add(jPanel4);

jPanel3.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

jLabel9.setText("Harga Sewa 24 Jam");
jPanel3.add(jLabel9);

hargaSewa24JamField.setEditable(false);
jPanel3.add(hargaSewa24JamField);

dataDetailPanel.add(jPanel3);

jPanel5.setLayout(new java.awt.GridLayout(1, 2, 10, 0));

```

```
jLabel10.setText("Merk");
```

```
jPanel5.add(jLabel10);
```

```
merkField.setEditable(false);
```

```
merkField.setToolTipText("");
```

```
jPanel5.add(merkField);
```

```
dataDetailPanel.add(jPanel5);
```

```
jPanel11.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel16.setText("Harga Sewa 12 Jam");
```

```
jPanel11.add(jLabel16);
```

```
hargaSewa12JamField.setEditable(false);
```

```
jPanel11.add(hargaSewa12JamField);
```

```
dataDetailPanel.add(jPanel11);
```

```
jPanel8.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel12.setText("Warna");
```

```
jPanel8.add(jLabel12);
```

```
warnaField.setEditable(false);
```

```
jPanel8.add(warnaField);
```

```
dataDetailPanel.add(jPanel8);
```

```
jPanel9.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel11.setText("Denda Per Jam ");
```

```
jPanel9.add(jLabel11);
```

```
dendaPerJamField.setEditable(false);
```

```
jPanel9.add(dendaPerJamField);
```

```
dataDetailPanel.add(jPanel9);
```

```
jPanel10.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
jLabel14.setText("Tahun");
```

```
jPanel10.add(jLabel14);
```

```
tahunField.setEditable(false);
```

```
jPanel10.add(tahunField);
```

```
dataDetailPanel.add(jPanel10);
```

```
jPanel12.setLayout(new java.awt.GridLayout(1, 2, 10, 0));
```

```
dataDetailPanel.add(jPanel12);
```

```
jLabel1.setText("Tanggal Pengembalian Kendaraan");
```

```
tglKembaliHariField.setText("HH");
```

```
tglKembaliHariField.setPreferredSize(new java.awt.Dimension(22, 20));
```

```
tglKembaliBulanField.setText("MM");
```

```
tglKembaliTahunField.setText("TTTT");
```

```
tglKembaliTahunField.setPreferredSize(new java.awt.Dimension(22, 20));
```

```
hitungButton.setText("HITUNG TOTAL BIAYA");

hitungButton.addActionListener(new java.awt.event.ActionListener() {

    public void actionPerformed(java.awt.event.ActionEvent evt) {

        hitungButtonActionPerformed(evt);

    }

});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);

this.setLayout(layout);

layout.setHorizontalGroup(

    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(layout.createSequentialGroup()

            .addContainerGap()

            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,

                    javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                .addComponent(dataDetailPanel2, javax.swing.GroupLayout.Alignment.TRAILING,

                    javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,

                    Short.MAX_VALUE)

                .addComponent(dataDetailPanel, javax.swing.GroupLayout.Alignment.TRAILING,

                    javax.swing.GroupLayout.DEFAULT_SIZE, 554, Short.MAX_VALUE))

            .addGap(62, 62, 62))

        .addGroup(layout.createSequentialGroup()

            .addGap(194, 194, 194)

            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

                .addComponent(jLabel1)

                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING,

                    false)

                        .addComponent(hitungButton, javax.swing.GroupLayout.Alignment.LEADING,

                            javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,

                            Short.MAX_VALUE)

                        .addGroup(javax.swing.GroupLayout.Alignment.LEADING,

                            layout.createSequentialGroup()

                                .createSequentialGroup()
```

```

        .addComponent(tglKembaliHariField, javax.swing.GroupLayout.PREFERRED_SIZE, 49,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addComponent(tglKembaliBulanField, javax.swing.GroupLayout.PREFERRED_SIZE,
50, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addComponent(tglKembaliTahunField, javax.swing.GroupLayout.PREFERRED_SIZE,
47, javax.swing.GroupLayout.PREFERRED_SIZE))))

        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))

);

layout.setVerticalGroup(

    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(layout.createSequentialGroup()

            .addContainerGap()

            .addComponent(dataDetailPanel, javax.swing.GroupLayout.PREFERRED_SIZE, 144,
javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(18, 18, 18)

            .addComponent(dataDetailPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(18, 18, 18)

            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

            .addGap(32, 32, 32)

            .addComponent(jLabel1)

            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

                .addComponent(tglKembaliHariField, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

                .addComponent(tglKembaliBulanField, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

                .addComponent(tglKembaliTahunField, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

```

```

        .addComponent(hitungButton, javax.swing.GroupLayout.PREFERRED_SIZE, 32,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addContainerGap(124, Short.MAX_VALUE))

    );
} // </editor-fold> // GEN-END: initComponents

```

```

private void noKTPFieldActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_noKTPFieldActionPerformed

    // TODO add your handling code here:

} // GEN-LAST:event_noKTPFieldActionPerformed

```

```

private void noPolisiFieldActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_noPolisiFieldActionPerformed

    // TODO add your handling code here:

} // GEN-LAST:event_noPolisiFieldActionPerformed

```

```

private void hitungButtonActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_hitungButtonActionPerformed

    String tanggalKembaliHari = tglKembaliHariField.getText();

    String tanggalKembaliBulan = tglKembaliBulanField.getText();

    String tanggalKembaliTahun = tglKembaliTahunField.getText();

    String tanggalKembali = tanggalKembaliHari

        + "-" + tanggalKembaliBulan

        + "-" + tanggalKembaliTahun;

    javax.swing.JPanel en = new belajardatabase.penyewaan

        .PengembalianDanBayar(frame, idSewa, tanggalKembali);

    frame.setContentPane(en);

    SwingUtilities.updateComponentTreeUI(frame.getContentPane());

} // GEN-LAST:event_hitungButtonActionPerformed

```



```
// Variables declaration - do not modify//GEN-BEGIN:variables
```

```
private javax.swing.JTextField alamatField;  
private javax.swing.JPanel dataDetailPanel;  
private javax.swing.JPanel dataDetailPanel2;  
private javax.swing.JTextField dendaPerJamField;  
private javax.swing.JTextField emailField;  
private javax.swing.JTextField hargaSewa12JamField;  
private javax.swing.JTextField hargaSewa24JamField;  
private javax.swing.JButton hitungButton;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel10;  
private javax.swing.JLabel jLabel11;  
private javax.swing.JLabel jLabel12;  
private javax.swing.JLabel jLabel13;  
private javax.swing.JLabel jLabel14;  
private javax.swing.JLabel jLabel15;  
private javax.swing.JLabel jLabel16;  
private javax.swing.JLabel jLabel17;  
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel22;  
private javax.swing.JLabel jLabel23;  
private javax.swing.JLabel jLabel24;  
private javax.swing.JLabel jLabel25;  
private javax.swing.JLabel jLabel26;  
private javax.swing.JLabel jLabel27;  
private javax.swing.JLabel jLabel28;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel8;  
private javax.swing.JLabel jLabel9;  
private javax.swing.JPanel jPanel1;
```

```
private javax.swing.JPanel jPanel10;  
private javax.swing.JPanel jPanel11;  
private javax.swing.JPanel jPanel12;  
private javax.swing.JPanel jPanel23;  
private javax.swing.JPanel jPanel24;  
private javax.swing.JPanel jPanel25;  
private javax.swing.JPanel jPanel26;  
private javax.swing.JPanel jPanel27;  
private javax.swing.JPanel jPanel28;  
private javax.swing.JPanel jPanel29;  
private javax.swing.JPanel jPanel3;  
private javax.swing.JPanel jPanel30;  
private javax.swing.JPanel jPanel31;  
private javax.swing.JPanel jPanel32;  
private javax.swing.JPanel jPanel4;  
private javax.swing.JPanel jPanel5;  
private javax.swing.JPanel jPanel6;  
private javax.swing.JPanel jPanel7;  
private javax.swing.JPanel jPanel8;  
private javax.swing.JPanel jPanel9;  
private javax.swing.JTextField jenisKelaminField;  
private javax.swing.JTextField kotaField;  
private javax.swing.JTextField merkField;  
private javax.swing.JTextField namaField;  
private javax.swing.JTextField noHPField;  
private javax.swing.JTextField noKTPField;  
private javax.swing.JTextField noPolisiField;  
private javax.swing.JTextField pekerjaanField;  
private javax.swing.JTextField tahunField;  
private javax.swing.JTextField tanggalLahirField;  
private javax.swing.JTextField teleponField;
```

```
private javax.swing.JTextField tglBatasKembaliBulanField;  
private javax.swing.JTextField tglBatasKembaliHariField;  
private javax.swing.JTextField tglBatasKembaliTahunField;  
private javax.swing.JTextField tglKembaliBulanField;  
private javax.swing.JTextField tglKembaliHariField;  
private javax.swing.JTextField tglKembaliTahunField;  
private javax.swing.JTextField tglSewaBulanField;  
private javax.swing.JTextField tglSewaHariField;  
private javax.swing.JTextField tglSewaTahunField;  
private javax.swing.JTextField warnaField;  
// End of variables declaration//GEN-END:variables  
}
```

BAB VI KESIMPULAN

3.1 Kesimpulan

Operator mudah mengolah semua data-data dengan sistem informasi yang baru, dari data mobil, sewa, biaya, pelanggan. Sehingga operator dengan mudah mencari suatu informasi yang dibutuhkan.

Penggunaan buku daftar penyewaan dan pengembalian sudah tidak diperlukan, karena dengan sistem informasi yang baru, operator tinggal menginputkan data penyewaan maupun data pengembalian.

Operator dapat mengetahui langsung dengan sistem informasi yang baru, apabila saat transaksi kembali ternyata pelanggan mengalami keterlambatan pengembalian. Karena sistem secara otomatis dapat menghitung berapa lama keterlambatannya dan berapa denda yang harus dibayar oleh pelanggan.

DAFTAR PUSTAKA

http://mercusian.blogspot.com/2012/10/makalah-rental-mobil_23.html

<http://www.scribd.com/doc/57160984/Makalah-Investasi-Rental-Mobil#scribd>

<http://www.slideshare.net/emagazeboo/makalah-database-sistem-rental-mobil>

<http://www.rentalmobilcirebon.com/?s=contoh+makalah+rental+mobil>