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UJIAN AKHIR SEMESTER PEMROGRAMAN BERORIENTASI OBJEK

LAPORAN SISTEM PARKIR JAVA BERBASIS GUI MENGGUNAKAN NETBEANS

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NETBEANS

A. Sejarah Singkat

NetBeans dimulai sejak tahun 1996 sebagai Xelfi, Java IDE proyek mahasiswa di bawah bimbingan Fakultas Matematika dan Fisika yang bertempat di Charles University di Praha . Pada tahun 1997 Staněk Romawi membentuk perusahaan sekitar proyek tersebut kemuidan menghasilkan versi komersial NetBeans IDE hingga dibeli oleh Sun Microsystems pada tahun 1999. Komunitas NetBeans sejak itu terus bertambah banyak, berkat individu dan perusahaan yang menggunakan dan berkontribusi dalam proyek tersebut.

NetBeans IDE 6.0 memperkenalkan dukungan dalam mengembangkan modul IDE dan aplikasi klien kaya berdasarkan platform NetBeans, Java Swing GUI builder, meningkatkan CVS dukungan, WebLogic 9 dan JBoss 4 dukungan, dan perangkat tambahan banyak editor. NetBeans 6 is available in official repositories of major Linux distributions. NetBeans 6 tersedia dalam repositori resmi dari distribusi Linux utama.

NetBeans Enterprise Pack yang mendukung pengembangan aplikasi Java EE 5 perusahaan, termasuk web orkestrasi layanan (untuk BPEL), SOA alat desain visual, UML modeling dan skema XML tools. The NetBeans IDE Bundle for C/C++ supports C/C++ development. The NetBeans IDE Bundle untuk C/C ++ mendukung C/C ++ pembangunan.

Hosting pengembang sumber terbuka dalam sebuah proyek di kenai.com tambahan manfaat dari instant messaging dan pelacakan masalah integrasi dan navigasi kanan dalam IDE, dukungan untuk pengembangan aplikasi web dengan PHP 5.3 dan kerangka Symfony, dan kode rampung diperbaiki, layout, petunjuk dan navigasi dalam proyek JavaFX. Dirilis di bulan Juni 2010, menambahkan dukungan untuk OSGi , Java EE injeksi ketergantungan (JSR-299), Spring Framework 3.0, Zend Framework untuk PHP , dan navigasi kode lebih mudah, format , petunjuk, dan refactoring dalam beberapa bahasa.

B. Pengertian NetBeans

Netbeans merupakan sebuah aplikasi Integrated Development Environment (IDE) berbasis Java dari Sun Microsystems yang berjalan di atas swing. Swing disini adalah sebuah teknologi Java untuk pengembangan aplikasi dekstop yang dapat berjalan di berbagai macam platform seperti windows, linux, Mac OS X dan juga Solaris. Sebuah

Integrated Development Environment adalah lingkup pemrograman yang di integrasikan ke dalam suatu aplikasi perangkat lunak yang menyediakan Graphic User Interface (GUI), yaitu suatu kode editor atau text, suatu compiler dan suatu debugger.

C. Fungsi dan Fitur-Fitur NetBeans

Berasarkan fungsinya, Netbeans bisa digunakan progammer untuk menulis, meng-compile, mencari kesalahan dan menyebarkan program netbeans yang ditulis dalam bahasa pemrograman java namun selain itu netbeans bisa mendukung bahasa pemrograman lainnya dan program ini juga bebas untuk digunakan dan untuk membuat professional dekstop, web, enterprise, and mobile applications dengan Java language, C/C++, dan bahkan dynamic languages seperti PHP, JavaScript, Groovy, dan Ruby.
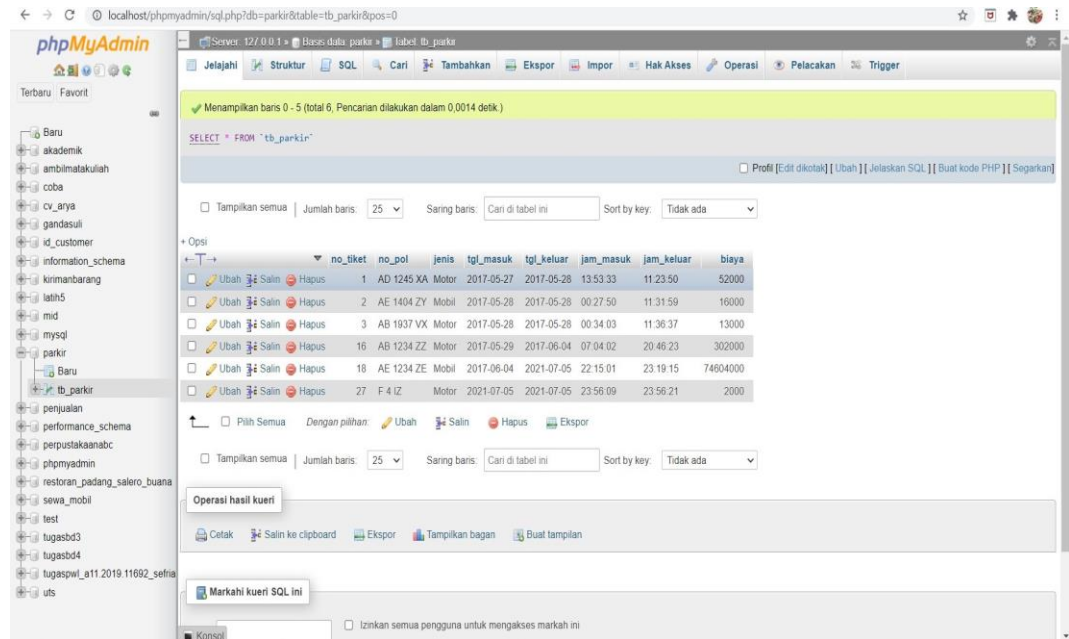
Netbeans ini memiliki bebrapa fitur adapaun Fitur fitur yang terdapat dalam netbeans antara lain:

1. **Smart Code Completion**: yaitu berfungsi untuk mengusulkan nama variabel dari suatu tipe, melengkapi keyword dan juga mengusulkan tipe parameter dari sebuah method.

2. **Bookmarking**: fitur yang satu ini digunakan untuk menandai baris yang suatu saat ingin kita modifikasi.

3. **Go to commands**: fitur ini digunakan untuk jump ke deklarasi variabel, source code atau file yang terdapat pada project yang sama.

4. **Code generator**: Apabila kita menggunakan fitur ini kita akan bisa meng-generate constructor, setter and getter method dan yang lainnya.

5. **Error stripe**: fitur ini akan menandai baris yang eror dengan memberi highlight red.

PENJELASAN PROGRAM

A. Source Code beserta penjelasannya

- **Buat Database**

Membuat Database sebagai langkah awal lalu membuat sebuah table yaitu table parkir. Sebelum menambahkan data, terlebih dahulu atur struktur table sesuai dengan apa yang telah di jelaskan pada soal UAS. Jika sudah tersimpan, selanjutnya tambahkan data dalam database parkir.

Klik "kirim" dan data akan tersimpan seperti gambar di atas. Penting: <u>integer</u> berkaitan dengan angka, <u>varchar</u> kaitannya dengan kalimat, <u>enum</u> kaitannya dengan pilihan transportasi, <u>date</u> kaitannya dengan tanggal, dan <u>time</u> kaitannya dengan jam.

- **Buat Koneksi Database**

```java
package ta_parkir; import java.sql.*;
/**
*
* @author zurin
*/
public class koneksi { public Connection conn; public Statement st;
public ResultSet rs;

public void koneksi()
{
konek("localhost","parkir","root","");
}


public void konek(String server, String db, String user,String passw
d){ System.out.println("Keterangan");
try {
Class.forName("com.mysql.jdbc.Driver");
} catch (ClassNotFoundException e) { System.out.println("Driver JDBC
 tidak barhasil Load"); e.printStackTrace();
```

```
return;
}
System.out.println("Driver berhasil di Load"); conn = null;
try {
conn = DriverManager.getConnection( "jdbc:mysql://"+server+":3306/"+
db,user,passwd);

} catch (SQLException e) {
System.out.println("Tidak bisa koneksi ke database"); e.printStackTr
ace();
return;
}
if (conn != null) System.out.println("Berhasil Koneksi!");
else
System.out.println("Koneksi Gagal    !");
}
}
```

- **Full Source Code (Pembuatan Frame beserta Isi dari Sistem)**

```
package ta_parkir;

import java.awt.Color;
import java.sql.SQLException; import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel; import java.text.DecimalFo
rmat;
import java.text.DecimalFormatSymbols;


public class fParkir extends javax.swing.JFrame { DefaultTableModel ma
suk, keluar;
koneksi konek = new koneksi();


public fParkir(java.awt.Frame parent, boolean modal) {
//        super(parent, modal); konek.koneksi(); initComponents();
btnSimpan.setBackground(Color.gray); btnReset.setBackground(Color.gray
); btnCari.setBackground(Color.gray); btnKeluar.setBackground(Color.gr
ay);
//btnCetak.setBackground(Color.green); btnClear.setBackground(Color.gr
ay); tampil_masuk();
tampil_keluar();
}
@SuppressWarnings("unchecked")
```

```java
// <editor-
fold defaultstate="collapsed" desc="Generated Code"> private void init
Components() {

lblbiaya = new javax.swing.JLabel(); jTabbedPane1 = new javax.swing.JT
abbedPane();

jPanel1 = new javax.swing.JPanel(); jScrollPane2 = new javax.swing.JSc
rollPane(); tbKeluar = new javax.swing.JTable();
jLabel4 = new javax.swing.JLabel(); jLabel5 = new javax.swing.JLabel()
; jLabel6 = new javax.swing.JLabel(); jLabel7 = new javax.swing.JLabel
(); jLabel10 = new javax.swing.JLabel(); jLabel11 = new javax.swing.JL
abel(); txtKNoPol = new javax.swing.JTextField();
txtKNoTiket = new javax.swing.JTextField(); txtKJenis = new javax.swin
g.JTextField(); txtKTglMasuk = new javax.swing.JTextField(); txtKDuras
iJ = new javax.swing.JTextField(); txtKBiaya = new javax.swing.JTextFi
eld(); btnCari = new javax.swing.JButton(); btnKeluar = new javax.swin
g.JButton();
txtKBiayaAkhir = new javax.swing.JTextField(); jLabel12 = new javax.sw
ing.JLabel();
btnClear = new javax.swing.JButton(); jSeparator1 = new javax.swing.JS
eparator(); jSeparator2 = new javax.swing.JSeparator(); jButton1 = new
 javax.swing.JButton(); jPanel2 = new javax.swing.JPanel(); jLabel1 =
new javax.swing.JLabel(); jLabel2 = new javax.swing.JLabel(); txtNoPol
 = new javax.swing.JTextField();
cbJenis = new javax.swing.JComboBox<>(); btnSimpan = new javax.swing.J
Button(); jScrollPane1 = new javax.swing.JScrollPane();

tbMasuk = new javax.swing.JTable(); btnReset = new javax.swing.JButton
(); jLabel3 = new javax.swing.JLabel(); jMenuBar1 = new javax.swing.JM
enuBar();

lblbiaya.setText("jLabel13");


setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE)
; setTitle("Menu Parkir");
setResizable(false);


tbKeluar.setBackground(new java.awt.Color(102, 102, 102));
tbKeluar.setForeground(new java.awt.Color(255, 255, 255)); tbKeluar.se
tModel(new javax.swing.table.DefaultTableModel(
new Object [][] {
```

```java
        },
        new String [] {
            "No. Tiket", "No. Pol", "Jenis", "Tgl Keluar", "Jam Keluar", "Biaya"
        }
    ));
    jScrollPane2.setViewportView(tbKeluar);


    jLabel4.setText("Nomor Polisi");


    jLabel5.setText("No. Tiket");


    jLabel6.setText("Jenis Kendaraan");


    jLabel7.setText("Tgl Masuk");


    jLabel10.setText("Durasi Jam");


    jLabel11.setText("Biaya :");


    txtKNoPol.addActionListener(new java.awt.event.ActionListener() { public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtKNoPolActionPerformed(evt);
    }
    });
    txtKNoPol.addKeyListener(new java.awt.event.KeyAdapter() { public void keyTyped(java.awt.event.KeyEvent evt) {
        txtKNoPolKeyTyped(evt);
    }
    });


    txtKNoTiket.setEditable(false);
    txtKNoTiket.addActionListener(new java.awt.event.ActionListener() { public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtKNoTiketActionPerformed(evt);
    }
    });
```

```java
txtKJenis.setEditable(false);


txtKTglMasuk.setEditable(false);
txtKTglMasuk.addActionListener(new java.awt.event.ActionListener() { p
ublic void actionPerformed(java.awt.event.ActionEvent evt) {
txtKTglMasukActionPerformed(evt);
}

});


txtKDurasiJ.setEditable(false);


txtKBiaya.setEditable(false);


btnCari.setBackground(new java.awt.Color(204, 204, 204)); btnCari.setT
ext("Cari");

btnCari.setBorder(javax.swing.BorderFactory.createBevelBorder(javax.sw
ing.border.BevelB order.RAISED));
btnCari.addActionListener(new java.awt.event.ActionListener() { public
 void actionPerformed(java.awt.event.ActionEvent evt) {
btnCariActionPerformed(evt);
}
});


btnKeluar.setBackground(new java.awt.Color(153, 153, 153)); btnKeluar.
setText("Jam Keluar");

btnKeluar.setBorder(javax.swing.BorderFactory.createBevelBorder(javax.
swing.border.Beve lBorder.RAISED));
btnKeluar.addActionListener(new java.awt.event.ActionListener() { publ
ic void actionPerformed(java.awt.event.ActionEvent evt) {
btnKeluarActionPerformed(evt);
}
});


txtKBiayaAkhir.setEditable(false); txtKBiayaAkhir.addActionListener(ne
w java.awt.event.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) { txtKBiay
aAkhirActionPerformed(evt);
```

```java
}
});


jLabel12.setText("Biaya Akhir");


btnClear.setBackground(new java.awt.Color(153, 153, 153)); btnClear.se
tText("Delete");

btnClear.setBorder(javax.swing.BorderFactory.createBevelBorder(javax.s
wing.border.Bevel Border.RAISED));
btnClear.addActionListener(new java.awt.event.ActionListener() { publi
c void actionPerformed(java.awt.event.ActionEvent evt) {
btnClearActionPerformed(evt);
}
});


jSeparator1.setBackground(new java.awt.Color(0, 0, 0)); jSeparator1.se
tAlignmentY(0.7F);

jSeparator2.setBackground(new java.awt.Color(0, 0, 0)); jSeparator2.se
tAlignmentY(0.7F);

jButton1.setText("Keluar"); jButton1.setBorder(javax.swing.BorderFacto
ry.createCompoundBorder()); jButton1.addActionListener(new java.awt.ev
ent.ActionListener() {
public void actionPerformed(java.awt.event.ActionEvent evt) { jButton1
ActionPerformed(evt);
}
});


javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jP
anel1);

jPanel1.setLayout(jPanel1Layout); jPanel1Layout.setHorizontalGroup(
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LE
ADING)
.addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addComponent(jSeparator1)
```

```
.addComponent(jSeparator2))
.addContainerGap())
.addGroup(jPanel1Layout.createSequentialGroup()
.addContainerGap()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addGroup(jPanel1Layout.createSequentialGroup()
.addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 96
9, javax.swing.GroupLayout.PREFERRED_SIZE)
.addContainerGap(42, Short.MAX_VALUE))
.addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.TRAILI NG)
.addGroup(jPanel1Layout.createSequentialGroup()
.addGap(0, 0, Short.MAX_VALUE)
.addComponent(btnKeluar, javax.swing.GroupLayout.PREFERRED_SIZE, 166,
javax.swing.GroupLayout.PREFERRED_SIZE))
.addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addComponent(jLabel5)
.addComponent(jLabel6)

.addComponent(jLabel7)
.addComponent(jLabel4))
.addGap(25, 25, 25)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addComponent(txtKNoPol)
.addComponent(txtKNoTiket)
.addComponent(txtKJenis, javax.swing.GroupLayout.Alignment.TRAILING)
.addComponent(txtKTglMasuk))))

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addGroup(jPanel1Layout.createSequentialGroup()
.addGap(171, 171, 171)
```

```
.addComponent(btnCari, javax.swing.GroupLayout.PREFERRED_SIZE, 109, ja
vax.swing.GroupLayout.PREFERRED_SIZE))
.addGroup(jPanel1Layout.createSequentialGroup()
.addGap(117, 117, 117)
.addComponent(btnClear, javax.swing.GroupLayout.PREFERRED_SIZE, 122, j
avax.swing.GroupLayout.PREFERRED_SIZE)))
.addGap(377, 377, 377))
.addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addGroup(jPanel1Layout.createSequentialGroup()
.addGap(131, 131, 131)

.addComponent(jLabel12)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
.addComponent(txtKBiayaAkhir, javax.swing.GroupLayout.PREFERRED_SIZE,
153, javax.swing.GroupLayout.PREFERRED_SIZE))
.addGroup(jPanel1Layout.createSequentialGroup()
.addGap(132, 132, 132)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG, false)
.addGroup(jPanel1Layout.createSequentialGroup()
.addComponent(jLabel11)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, j
avax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
.addComponent(txtKBiaya, javax.swing.GroupLayout.PREFERRED_SIZE, 151,
javax.swing.GroupLayout.PREFERRED_SIZE))
.addGroup(jPanel1Layout.createSequentialGroup()
.addComponent(jLabel10)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
.addComponent(txtKDurasiJ, javax.swing.GroupLayout.PREFERRED_SIZE, 151
, javax.swing.GroupLayout.PREFERRED_SIZE)))))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, j
avax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 90, ja
vax.swing.GroupLayout.PREFERRED_SIZE)
.addGap(97, 97, 97))))))
);
```

```
jPanel1Layout.setVerticalGroup( jPanel1Layout.createParallelGroup(java
x.swing.GroupLayout.Alignment.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.cr
eateSequentialGroup()
.addContainerGap()
.addComponent(jSeparator1, javax.swing.GroupLayout.PREFERRED_SIZE, 10,
 javax.swing.GroupLayout.PREFERRED_SIZE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addGroup(jPanel1Layout.createSequentialGroup()
.addGap(12, 12, 12)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.BASEL INE)
.addComponent(jLabel7)
.addComponent(txtKTglMasuk, javax.swing.GroupLayout.PREFERRED_SIZE, ja
vax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_
SIZE)))
.addGroup(jPanel1Layout.createSequentialGroup()
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, j
avax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
.addComponent(btnCari)))
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
.addComponent(jSeparator2, javax.swing.GroupLayout.PREFERRED_SIZE, 10,
 javax.swing.GroupLayout.PREFERRED_SIZE)
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.BASEL INE)
.addComponent(jLabel4, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swi
ng.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
.addComponent(txtKNoPol, javax.swing.GroupLayout.PREFERRED_SIZE, javax
.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZ
E)
.addComponent(jLabel11)

.addComponent(txtKBiaya, javax.swing.GroupLayout.PREFERRED_SIZE, javax
.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZ
E))

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addGroup(jPanel1Layout.createSequentialGroup()
```

```
.addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.BASEL INE)
.addComponent(txtKNoTiket, javax.swing.GroupLayout.PREFERRED_SIZE, jav
ax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_S
IZE)
.addComponent(jLabel5)
.addComponent(jLabel10)
.addComponent(txtKDurasiJ, javax.swing.GroupLayout.PREFERRED_SIZE, jav
ax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_S
IZE))
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, j
avax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.BASEL INE)
.addComponent(jLabel6)
.addComponent(txtKJenis, javax.swing.GroupLayout.PREFERRED_SIZE, javax
.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZ
E)
.addComponent(txtKBiayaAkhir, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRE
D_SIZE)
.addComponent(jLabel12))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
)
.addGroup(jPanel1Layout.createSequentialGroup()
.addGap(6, 6, 6)

.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 53, ja
vax.swing.GroupLayout.PREFERRED_SIZE)
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, j
avax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.BASEL INE)
.addComponent(btnKeluar, javax.swing.GroupLayout.PREFERRED_SIZE, 45, j
avax.swing.GroupLayout.PREFERRED_SIZE)
.addComponent(btnClear, javax.swing.GroupLayout.PREFERRED_SIZE, 43, ja
vax.swing.GroupLayout.PREFERRED_SIZE))
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
.addComponent(jScrollPane2, javax.swing.GroupLayout.PREFERRED_SIZE, 25
7, javax.swing.GroupLayout.PREFERRED_SIZE)
```

```java
    .addContainerGap())
);


jTabbedPane1.addTab("Jam Keluar", jPanel1);


jLabel1.setText("Nomor Polisi");


jLabel2.setText("Jenis Kendaraan");


txtNoPol.addKeyListener(new java.awt.event.KeyAdapter() { public void
keyTyped(java.awt.event.KeyEvent evt) {
txtNoPolKeyTyped(evt);
}
});


cbJenis.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] {
 "-Pilih Jenis Kendaraan-", "Motor", "Mobil", "Truk" }));


btnSimpan.setText("Simpan");

btnSimpan.addActionListener(new java.awt.event.ActionListener() { publ
ic void actionPerformed(java.awt.event.ActionEvent evt) {
btnSimpanActionPerformed(evt);
}
});


tbMasuk.setBackground(new java.awt.Color(102, 102, 102));
tbMasuk.setForeground(new java.awt.Color(255, 255, 255)); tbMasuk.setM
odel(new javax.swing.table.DefaultTableModel(
new Object [][] {

},
new String [] {
"No. Tiket", "No. Pol", "Jenis", "Tanggal Masuk", "Jam Masuk"
}
));
jScrollPane1.setViewportView(tbMasuk);
```

```java
btnReset.setText("Reset");
btnReset.addActionListener(new java.awt.event.ActionListener() { publi
c void actionPerformed(java.awt.event.ActionEvent evt) {
btnResetActionPerformed(evt);
}
});


javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jP
anel2); jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup( jPanel2Layout.createParallelGroup(ja
vax.swing.GroupLayout.Alignment.LEADING)
.addGroup(jPanel2Layout.createSequentialGroup()

.addGap(116, 116, 116)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG)
.addComponent(jLabel2)
.addComponent(jLabel1))
.addGap(23, 23, 23)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADI NG, false)
.addGroup(jPanel2Layout.createSequentialGroup()
.addComponent(btnSimpan)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
.addComponent(btnReset, javax.swing.GroupLayout.PREFERRED_SIZE, 73, ja
vax.swing.GroupLayout.PREFERRED_SIZE))
.addComponent(txtNoPol)
.addComponent(cbJenis, 0, 306, Short.MAX_VALUE))
.addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE
))
.addGroup(jPanel2Layout.createSequentialGroup()
.addContainerGap()
.addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 996,
 Short.MAX_VALUE)
.addContainerGap())
);
jPanel2Layout.setVerticalGroup( jPanel2Layout.createParallelGroup(java
x.swing.GroupLayout.Alignment.LEADING)
.addGroup(jPanel2Layout.createSequentialGroup()
.addGap(23, 23, 23)
```

```java
.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.BASEL INE)
.addComponent(jLabel1)

.addComponent(txtNoPol, javax.swing.GroupLayout.PREFERRED_SIZE, javax.
swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE
))
.addGap(18, 18, 18)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.BASEL INE)
.addComponent(jLabel2)
.addComponent(cbJenis, javax.swing.GroupLayout.PREFERRED_SIZE, javax.s
wing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
)
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.BASEL INE)
.addComponent(btnSimpan)
.addComponent(btnReset))
.addGap(18, 18, 18)
.addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT_SIZE, 319,
 Short.MAX_VALUE)
.addContainerGap())
);


jTabbedPane1.addTab("Jam Masuk", jPanel2);


jLabel3.setFont(new java.awt.Font("Arial Black", 1, 28)); // NOI18N jL
abel3.setText("Sistem Parkir PT XYZ"); setJMenuBar(jMenuBar1);

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getConten
tPane()); getContentPane().setLayout(layout);
layout.setHorizontalGroup( layout.createParallelGroup(javax.swing.Grou
pLayout.Alignment.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSeq
uentialGroup()
.addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE
)
.addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 10
31, javax.swing.GroupLayout.PREFERRED_SIZE)
```

```java
.addContainerGap())
.addGroup(layout.createSequentialGroup()
.addGap(324, 324, 324)
.addComponent(jLabel3)
.addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE
))
);
layout.setVerticalGroup( layout.createParallelGroup(javax.swing.GroupL
ayout.Alignment.LEADING)
.addGroup(layout.createSequentialGroup()
.addContainerGap()
.addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED_SIZE, 43, jav
ax.swing.GroupLayout.PREFERRED_SIZE)
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, j
avax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
.addComponent(jTabbedPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 52
5, javax.swing.GroupLayout.PREFERRED_SIZE)
.addContainerGap())
);


pack();
}// </editor-fold>


private void txtNoPolKeyTyped(java.awt.event.KeyEvent evt) {
// TODO add your handling code here: evt.setKeyChar(Character.toUpperC
ase(evt.getKeyChar()));
}


private void btnSimpanActionPerformed(java.awt.event.ActionEvent evt)
{
// TODO add your handling code here:
if (txtNoPol.getText().isEmpty()) { JOptionPane.showMessageDialog(this
, "Nomor polisi belum diisi!");
} else if (cbJenis.getSelectedItem().equals("-Pilih Jenis Kendaraan-
")) { JOptionPane.showMessageDialog(this, "Jenis kendaraan belum dipil
ih");
} else {
String nopol, jenis, sql; nopol = txtNoPol.getText();
jenis = cbJenis.getSelectedItem().toString();


sql = "INSERT INTO tb_parkir(no_pol,jenis,tgl_masuk,jam_masuk)"
```

```java
+ "VALUES('"+nopol+"','"+jenis+"',CURDATE(),CURTIME())";
try{
konek.st = konek.conn.createStatement(); konek.st.execute(sql);
}
catch (SQLException e){
JOptionPane.showMessageDialog(this, "Data gagal disimpan"+e); return;
}
JOptionPane.showMessageDialog(this, "Data berhasil disimpan");
}
resetAll(); tampil_masuk(); tampil_keluar();
}


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

// TODO add your handling code here: txtNoPol.setText(""); cbJenis.set
SelectedIndex(0);
}


private void btnCariActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here: if(txtKNoPol.getText().isEmpty())
JOptionPane.showMessageDialog(this, "No. Pol masih kosong!"); else {
DecimalFormat rupiah = (DecimalFormat) DecimalFormat.getCurrencyInstan
ce(); DecimalFormatSymbols formatRp = new DecimalFormatSymbols(); form
atRp.setCurrencySymbol("Rp "); formatRp.setMonetaryDecimalSeparator(',
');
formatRp.setGroupingSeparator('.'); rupiah.setDecimalFormatSymbols(for
matRp);

String sql = "SELECT *, DATEDIFF(CURDATE(), tgl_masuk) durasi_hari, (T
IME_FORMAT(CURTIME(),'%H')-TIME_FORMAT(jam_masuk, '%H')) durasi_jam "
+ "FROM tb_parkir WHERE no_pol='"+txtKNoPol.getText()+"' AND biaya=0";
try
{
konek.st = konek.conn.createStatement(); konek.rs = konek.st.executeQu
ery(sql);
} catch (SQLException ex){ JOptionPane.showMessageDialog(this, "Kesala
han query"+ex);
}
int size=0; try {
while (konek.rs.next()){ size++;
```

```java
txtKNoTiket.setText(konek.rs.getString("no_tiket").toString()); txtKJe
nis.setText(konek.rs.getString("jenis").toString()); txtKTglMasuk.setT
ext(konek.rs.getString("tgl_masuk").toString());
//txtKJamMasuk.setText(konek.rs.getString("jam_masuk").toString()); in
t hari = Integer.parseInt(konek.rs.getString("durasi_hari"));
int jam = Integer.parseInt(konek.rs.getString("durasi_jam")); int biay
a, biaya_akhir; if(txtKJenis.getText().equals("Truk")){
txtKBiaya.setText(rupiah.format(5000)); biaya = 5000;
}
else if(txtKJenis.getText().equals("Mobil")){ txtKBiaya.setText(rupiah
.format(4000)); biaya = 4000;
}else {
txtKBiaya.setText(rupiah.format(2000)); biaya = 2000;
}
if(hari>0){
//txtKDurasiH.setText(""+hari+" hari"); txtKDurasiJ.setText("-");
biaya_akhir = biaya + (50000*hari); txtKBiayaAkhir.setText(rupiah.form
at(biaya_akhir)); lblbiaya.setText(""+biaya_akhir);
}
else{
//txtKDurasiH.setText("0 hari"); txtKDurasiJ.setText(konek.rs.getStrin
g("durasi_jam").toString()+" jam"); biaya_akhir = biaya + (1000*jam);
txtKBiayaAkhir.setText(rupiah.format(biaya_akhir));

lblbiaya.setText(""+biaya_akhir);
}


}
if(size==0)
{
JOptionPane.showMessageDialog(this,"Data tidak ditemukan"); return;
}
konek.rs.close(); konek.st.close();
} catch (SQLException ex){
}
}
}


private void txtKNoPolKeyTyped(java.awt.event.KeyEvent evt) {
// TODO add your handling code here: evt.setKeyChar(Character.toUpperC
ase(evt.getKeyChar()));
}
```

```java
private void btnKeluarActionPerformed(java.awt.event.ActionEvent evt)
{
// TODO add your handling code here: if(txtKNoPol.getText().isEmpty())
JOptionPane.showMessageDialog(this, "Data kosong!"); else {
int biaya = Integer.parseInt(lblbiaya.getText()); String sql, notiket;
notiket = txtKNoTiket.getText();

sql = "UPDATE tb_parkir SET tgl_keluar=CURDATE(), jam_keluar=CURTIME()
, biaya='"+biaya+"' "
+ "WHERE no_tiket='"+notiket+"'"; try{
konek.st = konek.conn.createStatement(); konek.st.execute(sql);
}
catch (SQLException e){
JOptionPane.showMessageDialog(this, "Data gagal disimpan"+e); return;
}
JOptionPane.showMessageDialog(this, "Data berhasil diperbaharui");


resetAll(); tampil_masuk(); tampil_keluar();
}
}


private void btnClearActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here: txtKNoPol.setText("");
//txtKNoTiket.setText(""); txtKJenis.setText(""); txtKTglMasuk.setText
("");
//  txtKJamMasuk.setText("");
//     txtKDurasiH.setText(""); txtKDurasiJ.setText(""); txtKBiaya.se
tText(""); txtKBiayaAkhir.setText("");
}


private void txtKTglMasukActionPerformed(java.awt.event.ActionEvent ev
t) {
// TODO add your handling code here:
}


private void txtKNoTiketActionPerformed(java.awt.event.ActionEvent evt
) {
// TODO add your handling code here:
}
```

```java
private void txtKBiayaAkhirActionPerformed(java.awt.event.ActionEvent
evt) {
// TODO add your handling code here:
}


private void txtKNoPolActionPerformed(java.awt.event.ActionEvent evt)
{
// TODO add your handling code here:
}


private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
 dispose();
// TODO add your handling code here:
}


public void resetAll(){ txtNoPol.setText(""); cbJenis.setSelectedIndex
(0);
masuk = (DefaultTableModel) tbMasuk.getModel(); keluar = (DefaultTable
Model) tbKeluar.getModel(); int rowCount1 = masuk.getRowCount();
int rowCount2 = keluar.getRowCount();
//Remove rows one by one from the end of the table

for (int i = rowCount1 - 1; i >= 0; i--) { masuk.removeRow(i);
}
for (int i = rowCount2 - 1; i >= 0; i--) { keluar.removeRow(i);
}
}


public void tampil_masuk(){
masuk = (DefaultTableModel) tbMasuk.getModel(); try {
konek.st = konek.conn.createStatement();
String query = "SELECT * FROM tb_parkir WHERE biaya=0 ORDER BY no_tike
t DESC LIMIT 25";
konek.rs = konek.st.executeQuery(query); while (konek.rs.next()) {
String no_tiket = konek.rs.getString("no_tiket"); String no_pol = kone
k.rs.getString("no_pol"); String jenis = konek.rs.getString("jenis");
String tgl_masuk = konek.rs.getString("tgl_masuk"); String jam_masuk =
 konek.rs.getString("jam_masuk");

String [] data = {no_tiket, no_pol, jenis, tgl_masuk, jam_masuk}; masu
k.addRow(data);
}
```

```java
} catch (Exception e) {
JOptionPane.showMessageDialog(this, "Gagal ambil data"+e);
}
tbMasuk.setModel(masuk);
}

public void tampil_keluar(){
DecimalFormat rupiah = (DecimalFormat) DecimalFormat.getCurrencyInstan
ce(); DecimalFormatSymbols formatRp = new DecimalFormatSymbols(); form
atRp.setCurrencySymbol("Rp "); formatRp.setMonetaryDecimalSeparator(',
');
formatRp.setGroupingSeparator('.'); rupiah.setDecimalFormatSymbols(for
matRp);

keluar = (DefaultTableModel) tbKeluar.getModel(); try {
konek.st = konek.conn.createStatement();
String query = "SELECT * FROM tb_parkir WHERE biaya <> 0 ORDER BY tgl_
keluar DESC,jam_keluar DESC LIMIT 15";
konek.rs = konek.st.executeQuery(query); while (konek.rs.next()) {
String no_tiket = konek.rs.getString("no_tiket"); String no_pol = kone
k.rs.getString("no_pol"); String jenis = konek.rs.getString("jenis");
String tgl_keluar = konek.rs.getString("tgl_keluar"); String jam_kelua
r = konek.rs.getString("jam_keluar"); String biaya = konek.rs.getStrin
g("biaya");
Double biaya2 = Double.parseDouble(biaya); String biaya_final = (rupia
h.format(biaya2));

String [] data = {no_tiket, no_pol, jenis, tgl_keluar, jam_keluar, bia
ya_final}; keluar.addRow(data);
}
} catch (Exception e) {
JOptionPane.showMessageDialog(this, "Gagal ambil data"+e);
}
tbKeluar.setModel(keluar);

}

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
/* Set the Nimbus look and feel */
```

```java
//<editor-
fold defaultstate="collapsed" desc=" Look and feel setting code (optio
nal) ">
/* 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.ht
ml
*/ try {
for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManage
r.getInstalledLookAndFeels()) {
if ("Nimbus".equals(info.getName())) { javax.swing.UIManager.setLookAn
dFeel(info.getClassName()); break;
}
}
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(fParkir.class.getName()).log(java.u
til.logging.Level.SEV ERE, null, ex);
} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(fParkir.class.getName()).log(java.u
til.logging.Level.SEV ERE, null, ex);
} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(fParkir.class.getName()).log(java.u
til.logging.Level.SEV ERE, null, ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(fParkir.class.getName()).log(java.u
til.logging.Level.SEV ERE, null, ex);
}
//</editor-fold>


/* Create and display the dialog */ java.awt.EventQueue.invokeLater(ne
w Runnable() {
public void run() {
fParkir dialog = new fParkir(new javax.swing.JFrame(), true); dialog.a
ddWindowListener(new java.awt.event.WindowAdapter() {
@Override
public void windowClosing(java.awt.event.WindowEvent e) { System.exit(
0);
}
```

```
});
dialog.setVisible(true);
}
});
}


// Variables declaration -
 do not modify private javax.swing.JButton btnCari; private javax.swin
g.JButton btnClear; private javax.swing.JButton btnKeluar; private jav
ax.swing.JButton btnReset; private javax.swing.JButton btnSimpan;
private javax.swing.JComboBox<String> cbJenis; private javax.swing.JBu
tton jButton1;
private javax.swing.JLabel jLabel1; private javax.swing.JLabel jLabel1
0;

private javax.swing.JLabel jLabel11; private javax.swing.JLabel jLabel
12; private javax.swing.JLabel jLabel2; private javax.swing.JLabel jLa
bel3; private javax.swing.JLabel jLabel4; private javax.swing.JLabel j
Label5; private javax.swing.JLabel jLabel6; private javax.swing.JLabel
 jLabel7; private javax.swing.JMenuBar jMenuBar1; private javax.swing.
JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JScrollPane jScrollPane1; private javax.swing.JScr
ollPane jScrollPane2; private javax.swing.JSeparator jSeparator1; priv
ate javax.swing.JSeparator jSeparator2; private javax.swing.JTabbedPan
e jTabbedPane1; private javax.swing.JLabel lblbiaya;
private javax.swing.JTable tbKeluar; private javax.swing.JTable tbMasu
k; private javax.swing.JTextField txtKBiaya;
private javax.swing.JTextField txtKBiayaAkhir; private javax.swing.JTe
xtField txtKDurasiJ; private javax.swing.JTextField txtKJenis; private
 javax.swing.JTextField txtKNoPol; private javax.swing.JTextField txtK
NoTiket; private javax.swing.JTextField txtKTglMasuk; private javax.sw
ing.JTextField txtNoPol;
// End of variables declaration
}
```

B. Tools yang digunakan beserta penjelasannya
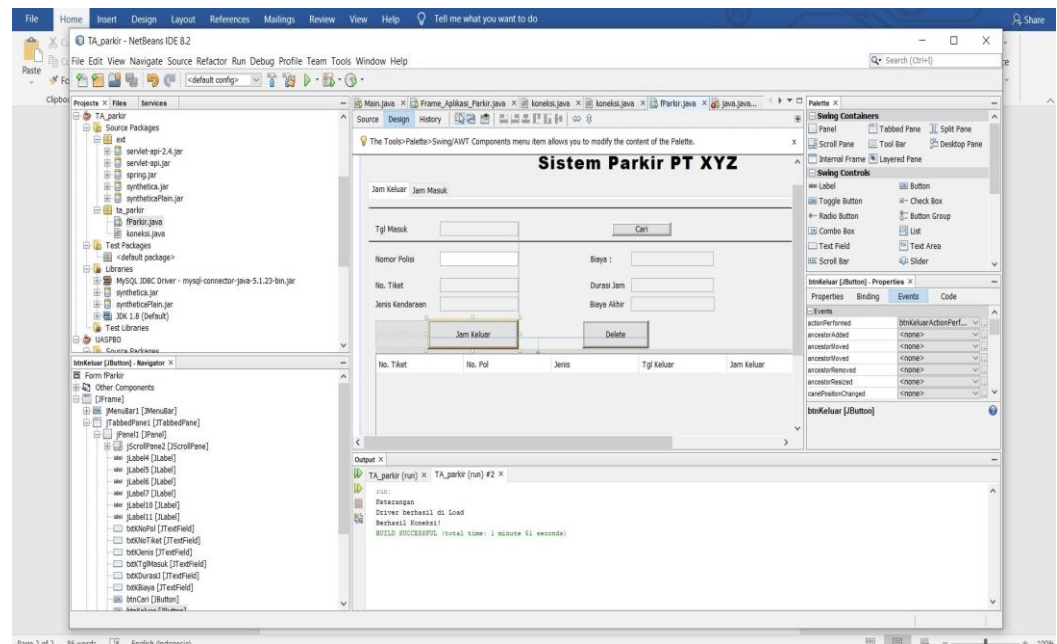
- **Swing Control**

    1) Label : Untuk memberikan keterangan tambahan atau indentitas pada
       tombol atau perintah lainnya. (contoh : 'SISTEM PARKIR PT YXZ, No.
       Polisi, Jenis Kendaraan" menggunakan Label.

2) Text Field : Untuk membuat kolom agar kelak bisa diisi perintah-perintah teks atau angka oleh user, semisal pada pembuatan aplikasi Sistem Parkir "text field" berfungsi untuk mengisi nomor polisi.

3) Combo Box : Berfungsi untuk menyisipkan beberapa pilihan / perintah, sehingga dengan Combo Box ini lebih menghemat tempat, karena dalam Combo Box ini terdiri dari beberapa pilihan. Dalam Program sendiri Combo Box digunakan untuk Jenis Kendaraan seperti ; Motor,Mobil atau Truk.

4) Button : Kontrol yang tampil pada layar dengan bentuk tertentu yang mirip dengan tombol persegi panjang dengan tulisan di tengahnya. (Button seperti ; Jam Masuk, Jam Keluar, Edit dan Delete).

5) Table : Menampilkan atau menyisipkan tabel pada aplikasi yang nantinya akan dibuat. Table disini nantinya akan menampilkan seperti ID, No.Polisi, Jenis Kendaraan, dll dalam Sistem Parkir PT YXZ.
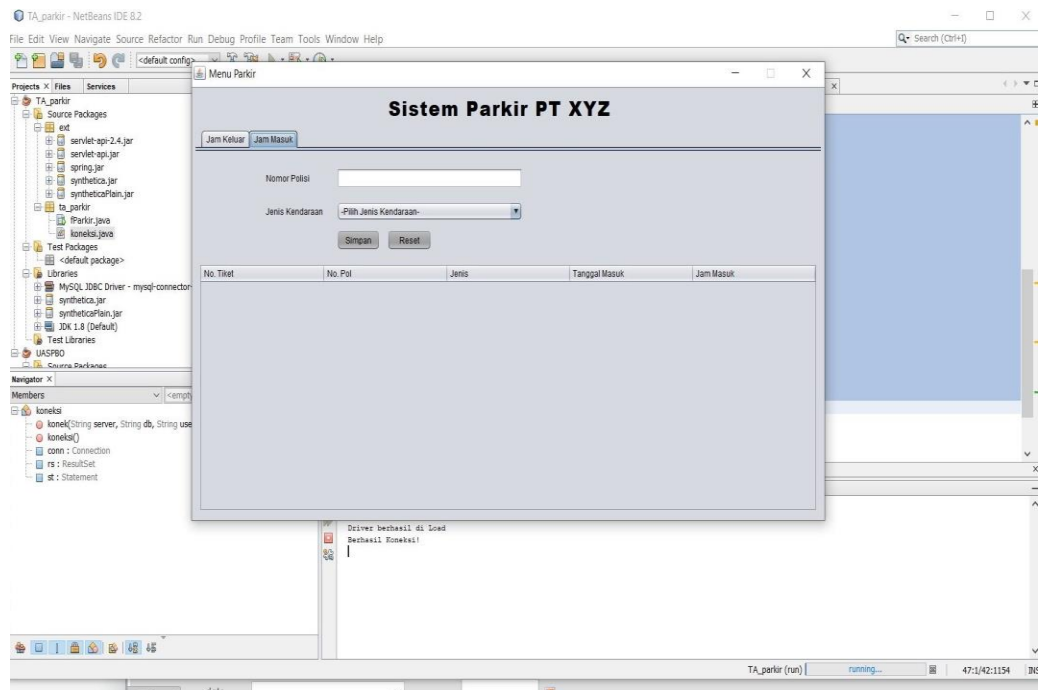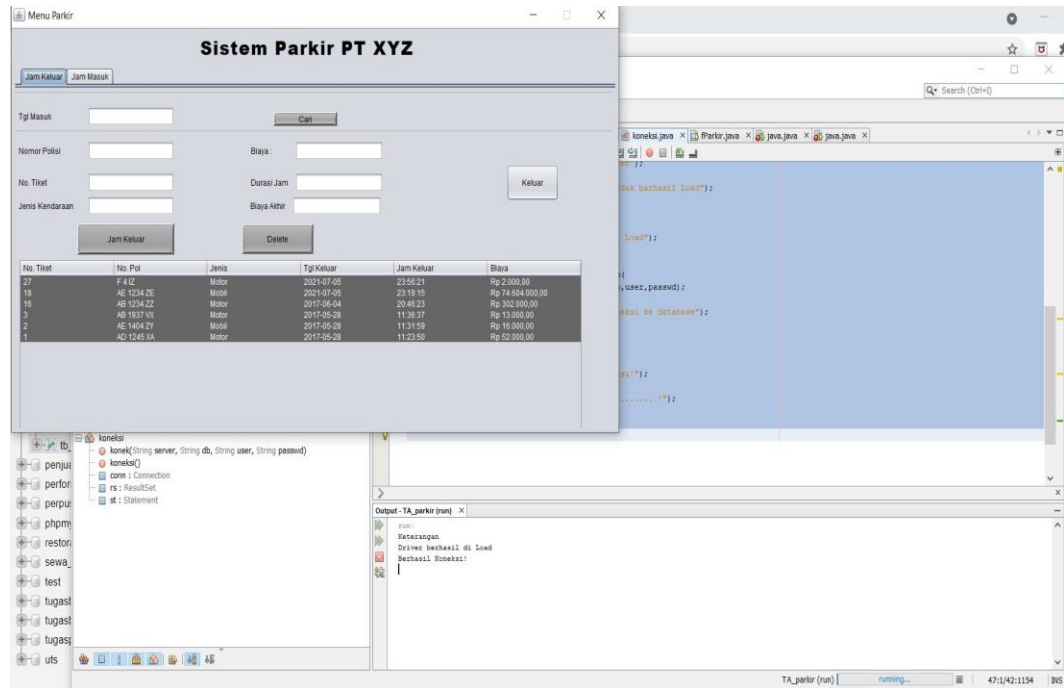
C. Gambar Program

- **Frame Utama**

Membuat Frame yang nantinya akan digunakan sebagai tampilan dari sistem tersebut.

- **Hasil Akhir Program**

DAFTAR PUSTAKA

- https://id.wikipedia.org/wiki/NetBeans

- https://www.nesabamedia.com/pengertian-netbeans/

- https://materibelajar.co.id/pengertian-netbeans/

- https://github.com/harkespan/pbo/blob/master/parkir.sql

- https://downloads.apache.org/netbeans/netbeans/12.0/netbeans-12.0-bin.zip

- https://tipsmenggunakanitu.blogspot.com/2019/06/cara-membuat-program-parkir-sederhana.html