Main java

```java
package hudan.pos;


import hudan.pos.ui.Login;


/**

 *

 */
public class Main {


    /**

     * @param args the command line arguments

     */
    public static void main(String[] args) {

        new Login().setVisible(true);

    }
```

}

Barang Java

```java
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
package hudan.pos.Dao;


import java.util.List;
import hudan.pos.entity.Barang;


/**
 *
 * @author HudanPurnomo
 */
public interface IBarang {
    public List<Barang> selectAll();
    public Barang selectById(int id);
    public int add(Barang barang);
```

```java
    public void update(Barang barang);

    public void delete(int id);

    public List<Barang> selectByPartNama(String nama);

}
```

Login.Java

```java
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.Dao;


/**

*/

public interface ILogin {

    public boolean isAccept(String username, String password);

}
```

Pelanggan.Java

```java
/*
```

package hudan.pos.Dao;

import java.util.List;

import hudan.pos.entity.Pelanggan;

/**

 *

*/

public interface IPelanggan {

   public List<Pelanggan> selectAll();

   public Pelanggan selectById(int id);

   public Pelanggan add(Pelanggan pelanggan);

   public void update(Pelanggan pelanggan);

   public void delete(int id);

}

Penjualan.Java

```java
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
package hudan.pos.Dao;

import java.util.List;
import hdan.pos.entity.Penjualan;

/**
 *
 */
public interface IPenjualan {
    public List<Penjualan> selectAll();
    public Penjualan selectById(int id);
    public int add(Penjualan penjualan);
    public void update(Penjualan penjualan);
    public void delete(int id);
}
```

Penjualan Barang

```
package hudan.pos.Dao;


import java.util.List;

import hudan.pos.entity.PenjualanBarang;


/**

 *


 */
public interface IPenjualanBarang{

    public List<PenjualanBarang> selectAll();

    public PenjualanBarang selectById(int id);

    public int add(PenjualanBarang penjualanBarang);

    public void addByBatch (List<PenjualanBarang> listPenjBrg);
```

```java
    public void update(PenjualanBarang penjualanBarang);

    public void delete(int id);

}
```

Barang Java

```java
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
package hudan.pos.DaoImpl;


import com.mysql.jdbc.Statement;

import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.ArrayList;

import java.util.List;
```

```java
import java.util.logging.Level;

import java.util.logging.Logger;

import hudan.pos.Dao.IBarang;

import hudan.pos.database.DataConnection;



/**

 *

*/

public class Barang implements IBarang{


    private String qSelectAll = "SELECT * FROM barang ORDER BY nama ASC";

    private String qSelectById = "SELECT * FROM barang WHERE IdBarang = ?";

    private String qSelectPart = "SELECT * FROM barang WHERE nama LIKE ?";

    private String qUpdate = "UPDATE barang SET nama = ?, jumlah = ?, hargaBeli = ?, hargaJual = ? WHERE IdBarang = ?";

    private String qAdd = "INSERT INTO barang (nama, jumlah, hargaBeli, hargaJual) VALUES(?, ?, ?, ?)";


    @Override
```

```java
    public List<hudan.pos.entity.Barang> selectAll() {

        List<hudan.pos.entity.Barang> lb = new
ArrayList<hudan.pos.entity.Barang>();

        Connection con = new DataConnection().buatKoneksi();

        PreparedStatement ps;

        try {

            ps = con.prepareStatement(qSelectAll);

            ResultSet rs = ps.executeQuery();

            while (rs.next()) {

                hudan.pos.entity.Barang b = new hudan.pos.entity.Barang();

                b.setId(rs.getInt(1));

                b.setNama(rs.getString(2));

                b.setHargaBeli(rs.getDouble(4));

                b.setHargaJual(rs.getDouble(5));

                b.setJumlah(rs.getInt(3));

                lb.add(b);

            }

        } catch (SQLException ex) {

            Logger.getLogger(Barang.class.getName()).log(Level.SEVERE,
null, ex);
```

```
        }

    return lb;

}


@Override

public hudan.pos.entity.Barang selectById(int id) {

    Connection con = new DataConnection().buatKoneksi();

    ResultSet rs = null;

    hudan.pos.entity.Barang barang = new hudan.pos.entity.Barang();

    try {

        PreparedStatement ps = con.prepareStatement(qSelectById);

        ps.setInt(1, id);

        rs = ps.executeQuery();

        rs.next();

        String nama = rs.getString(2);

        int jumlah = rs.getInt(3);

        double hargaBeli = rs.getDouble(4);

        double hargaJual = rs.getDouble(5);


        barang.setId(id);
```

```java
            barang.setNama(nama);

            barang.setJumlah(jumlah);

            barang.setHargaBeli(hargaBeli);

            barang.setHargaJual(hargaJual);

        } catch (SQLException ex) {

            Logger.getLogger(Barang.class.getName()).log(Level.SEVERE,
null, ex);

        }

        return barang;

    }


    @Override

    public int add(hudan.pos.entity.Barang barang) {

        Connection con = new DataConnection().buatKoneksi();

        ResultSet rs = null;

        int key = 0;

        try {

            PreparedStatement ps = con.prepareStatement(qAdd,
Statement.RETURN_GENERATED_KEYS);

            ps.setString(1, barang.getNama());
```

```
        ps.setInt(2, barang.getJumlah());

        ps.setDouble(3, barang.getHargaBeli());

        ps.setDouble(4, barang.getHargaJual());

        ps.executeUpdate();

        rs = ps.getGeneratedKeys();

        rs.next();

        key = rs.getInt(1);

    } catch (SQLException ex) {

        Logger.getLogger(Barang.class.getName()).log(Level.SEVERE,
null, ex);

    }

    return key;

}


    @Override

    public void update(hudan.pos.entity.Barang barang) {

        Connection con = new DataConnection().buatKoneksi();

        try {

            PreparedStatement ps = con.prepareStatement(qUpdate);

            ps.setString(1, barang.getNama());
```

```java
        ps.setInt(2, barang.getJumlah());

        ps.setDouble(3, barang.getHargaBeli());

        ps.setDouble(4, barang.getHargaJual());

        ps.setInt(5, barang.getId());

        ps.executeUpdate();

    } catch (SQLException ex) {

        Logger.getLogger(Barang.class.getName()).log(Level.SEVERE,
null, ex);

    }


    }


    public void updateByBatch(List<hudan.pos.entity.Barang> listBarang){

        Connection con = new DataConnection().buatKoneksi();

        PreparedStatement ps;

        try {

            ps = con.prepareStatement(qUpdate);

            for (int i = 0; i < listBarang.size(); i++) {

                ps.setString(1, listBarang.get(i).getNama());

                ps.setInt(2, listBarang.get(i).getJumlah());
```

```java
            ps.setDouble(3, listBarang.get(i).getHargaBeli());

            ps.setDouble(4, listBarang.get(i).getHargaJual());

            ps.setInt(5, listBarang.get(i).getId());

            ps.addBatch();

        }

        ps.executeBatch();

    } catch (SQLException ex) {

        Logger.getLogger(Barang.class.getName()).log(Level.SEVERE,
null, ex);

    }

}


    @Override

    public void delete(int id) {

        throw new UnsupportedOperationException("Not supported yet.");

    }


    @Override

    public List<hudan.pos.entity.Barang> selectByPartNama(String nama) {
```

```java
        List<hudan.pos.entity.Barang> lb = new
ArrayList<hudan.pos.entity.Barang>();

        Connection con = new DataConnection().buatKoneksi();

        PreparedStatement ps;

        try {

            ps = con.prepareStatement(qSelectPart);

            ps.setString(1, nama+"%");

            ResultSet rs = ps.executeQuery();

            while (rs.next()) {

                hudan.pos.entity.Barang b = new hudan.pos.entity.Barang();

                b.setId(rs.getInt(1));

                b.setNama(rs.getString(2));

                b.setHargaBeli(rs.getDouble(4));

                b.setHargaJual(rs.getDouble(5));

                b.setJumlah(rs.getInt(3));

                lb.add(b);

            }

        } catch (SQLException ex) {

            Logger.getLogger(Barang.class.getName()).log(Level.SEVERE,
null, ex);
```

```
        }

        return lb;

    }


}
```

Login.Java

```java
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
package hudan.pos.DaoImpl;


import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.logging.Level;

import java.util.logging.Logger;

import hudanpos.Dao.ILogin;
```

```java
import hudan.pos.database.DataConnection;


/**

 *


 */
public class Login implements ILogin{


    @Override
    public boolean isAccept(String username, String password) {

        Connection con = new DataConnection().buatKoneksi();

        PreparedStatement ps;

        ResultSet rs = null;

        String s = "SELECT COUNT(*) FROM LOGIN where username = ?
and password = ?";

        try {

            ps = con.prepareStatement(s);

            ps.setString(1, username);

            ps.setString(2, password);

            rs = ps.executeQuery();
```

```
            rs.next();

            return rs.getInt(1) == 1 ? true : false;

        } catch (SQLException ex) {

            Logger.getLogger(Login.class.getName()).log(Level.SEVERE, null,
ex);

        }

        return false;

    }


}
```

Pelanggan java

```
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.DaoImpl;


import java.sql.Connection;

import java.sql.PreparedStatement;
```

```java
import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.ArrayList;

import java.util.List;

import java.util.logging.Level;

import java.util.logging.Logger;

import hudan.pos.Dao.IPelanggan;

import hudan.pos.database.DataConnection;



/**

 *

*/

public class Pelanggan implements IPelanggan{


    private String qSelectAll = "Select * from pelanggan order by nama";

    private String qSelectById = "select * from pelanggan where idPelanggan
= ?";


    @Override

    public List<hudan.pos.entity.Pelanggan> selectAll() {
```

```java
        Connection con = new DataConnection().buatKoneksi();

        List<hudan.pos.entity.Pelanggan> listPelanggan = new
ArrayList<hudan.pos.entity.Pelanggan>();

        try {

            PreparedStatement ps = con.prepareStatement(qSelectAll);

            ResultSet rs = ps.executeQuery();

            while(rs.next()){

                hudan.pos.entity.Pelanggan p = new
hudan.pos.entity.Pelanggan();

                p.setId(rs.getInt(1));

                p.setNama(rs.getString(2));

                p.setNoHP(rs.getString(3));

                listPelanggan.add(p);

            }

        } catch (SQLException ex) {

            Logger.getLogger(Pelanggan.class.getName()).log(Level.SEVERE,
null, ex);

        }


        return listPelanggan;

    }
```

```java
    @Override

    public hudan.pos.entity.Pelanggan selectById(int id) {

        Connection con = new DataConnection().buatKoneksi();

        ResultSet rs = null;

        hudan.pos.entity.Pelanggan pelanggan = new
hudan.pos.entity.Pelanggan();

        try {

            PreparedStatement ps = con.prepareStatement(qSelectById);

            ps.setInt(1, id);

            System.out.println(ps.toString());

            rs = ps.executeQuery();

            rs.next();

            pelanggan.setId(id);

            pelanggan.setNama(rs.getString(2));

            pelanggan.setNoHP(rs.getString(3));

        } catch (SQLException ex) {

            Logger.getLogger(Pelanggan.class.getName()).log(Level.SEVERE,
null, ex);

        }
```

```java
        return pelanggan;

    }


    @Override

    public hudan.pos.entity.Pelanggan add(hudan.pos.entity.Pelanggan
pelanggan) {

        throw new UnsupportedOperationException("Not supported yet.");

    }


    @Override

    public void update(hudan.pos.entity.Pelanggan pelanggan) {

        throw new UnsupportedOperationException("Not supported yet.");

    }


    @Override

    public void delete(int id) {

        throw new UnsupportedOperationException("Not supported yet.");

    }


}
```

Penjualan.java

```java
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
package hudan.pos.DaoImpl;

import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.sql.Timestamp;
import java.util.ArrayList;
import java.util.Date;
import java.util.List;
import java.util.logging.Level;
import java.util.logging.Logger;
import hudan.pos.Dao.IPenjualan;
```

```java
import hudan.pos.database.DataConnection;


/**
 *
 */
public class Penjualan implements IPenjualan{

    private String qSelect = "SELECT * FROM penjualan";

    private String qAdd = "INSERT INTO penjualan (tanggal, idPelanggan)
values (?, ?)";


    @Override
    public List< hudan.pos.entity.Penjualan> selectAll() {

        Connection con = new DataConnection().buatKoneksi();

        ResultSet rs = null;

        List< hudan.pos.entity.Penjualan> listPenjualan = new
ArrayList<hudan.pos.entity.Penjualan>();

        try {

            PreparedStatement ps = con.prepareStatement(qSelect);

            rs = ps.executeQuery();

            while (rs.next()) {
```

```java
        hudan.pos.entity.Penjualan p = new hudan.pos.entity.Penjualan();

        p.setIdPenjualan(rs.getInt(1));

        p.setTanggal(rs.getDate(2));

        p.setPelanggan(new Pelanggan().selectById(rs.getInt(3)));

        listPenjualan.add(p);

      }

    } catch (SQLException ex) {

      Logger.getLogger(Penjualan.class.getName()).log(Level.SEVERE,
null, ex);

    }

    return listPenjualan;

  }


  @Override

  public hudan.pos.entity.Penjualan selectById(int id) {

    throw new UnsupportedOperationException("Not supported yet.");

  }


  @Override

  public int add(hudan.pos.entity.Penjualan penjualan) {
```

```java
        Connection con = new DataConnection().buatKoneksi();

        ResultSet rs = null;

        int key = 0;

        try {

            long time = penjualan.getTanggal().getTime();

            Timestamp ts = new Timestamp(time);

            PreparedStatement ps = con.prepareStatement(qAdd,
Statement.RETURN_GENERATED_KEYS);

            ps.setTimestamp(1, ts);

            ps.setInt(2, penjualan.getPelanggan().getId());

            ps.executeUpdate();

            rs = ps.getGeneratedKeys();

            rs.next();

            key = rs.getInt(1);

        } catch (SQLException ex) {

            Logger.getLogger(Penjualan.class.getName()).log(Level.SEVERE,
null, ex);

        }

        return key;

    }
```

```java
    @Override

    public void update(hudan.pos.entity.Penjualan penjualan) {

        throw new UnsupportedOperationException("Not supported yet.");

    }


    @Override

    public void delete(int id) {

        throw new UnsupportedOperationException("Not supported yet.");

    }


    public static void main(String[] args) {

        hudan.pos.entity.Penjualan p = new hudan .pos.entity.Penjualan();

        hudan.pos.entity.Pelanggan pe = new Pelanggan().selectById(1);

        p.setPelanggan(pe);

        p.setTanggal(new Date());

        new Penjualan().add(p);

    }

}
```

Penjualan barang

```java
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
package hudan pos.DaoImpl;


import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.ArrayList;

import java.util.List;

import java.util.logging.Level;

import java.util.logging.Logger;

import hudan.pos.Dao.IPenjualanBarang;

import hudan.pos.database.DataConnection;
```

```java
/**
 *
 */
public class PenjualanBarang implements  IPenjualanBarang{

    private String qSelect = "SELECT * FROM penjualanbrg";

    private String qAdd = "INSERT INTO penjualanbrg (IdPenjualan,
IdBarang, Jumlah, Diskon) VALUES (?, ?, ?, ?)";


    @Override
    public List< hudan.pos.entity.PenjualanBarang> selectAll() {

        throw new UnsupportedOperationException("Not supported yet.");

    }


    @Override
    public hudan.pos.entity.PenjualanBarang selectById(int id) {

        throw new UnsupportedOperationException("Not supported yet.");

    }


    @Override
    public int add(hudan pos.entity.PenjualanBarang penjualanBarang) {
```

```java
        Connection con = new DataConnection().buatKoneksi();

        ResultSet rs = null;

        int key = 0;

        try {

            PreparedStatement ps = con.prepareStatement(qAdd);

            ps.setInt(1, penjualanBarang.getPenjualan().getIdPenjualan());

            ps.setInt(2, penjualanBarang.getBarang().getId());

            ps.setInt(3, penjualanBarang.getJumlah());

            ps.setDouble(4, penjualanBarang.getDiskon());

            ps.executeUpdate();

            rs = ps.getGeneratedKeys();

            rs.next();

            key = rs.getInt(1);

        } catch (SQLException ex) {

Logger.getLogger(PenjualanBarang.class.getName()).log(Level.SEVERE,
null, ex);

        }

        return key;

    }
```

```java
    @Override

    public void addByBatch(List<hudan.pos.entity.PenjualanBarang>
listPenjBrg) {

        Connection con = new DataConnection().buatKoneksi();

        try {

            PreparedStatement ps = con.prepareStatement(qAdd);

            for (int i = 0; i < listPenjBrg.size(); i++) {

                ps.setInt(1, listPenjBrg.get(i).getPenjualan().getIdPenjualan());

                ps.setInt(2, listPenjBrg.get(i).getBarang().getId());

                ps.setInt(3, listPenjBrg.get(i).getJumlah());

                ps.setDouble(4, listPenjBrg.get(i).getDiskon());

                ps.addBatch();

            }

            ps.executeBatch();

        } catch (SQLException ex) {

Logger.getLogger(PenjualanBarang.class.getName()).log(Level.SEVERE,
null, ex);

        }

    }
```

```java
    @Override

    public void update(hudan.pos.entity.PenjualanBarang penjualanBarang) {

        throw new UnsupportedOperationException("Not supported yet.");

    }


    @Override

    public void delete(int id) {

        throw new UnsupportedOperationException("Not supported yet.");

    }

}
```

Data conection java

```java
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.database;


/**
```

```
 *

 */

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import javax.swing.JOptionPane;


public class DataConnection {

    private Connection con = null;

    private Statement st = null;

    private ResultSet rs = null;

    private String driver = "com.mysql.jdbc.Driver";

    private String url = "jdbc:mysql://localhost:3306/POS";

    private String user = "root";

    private String pass = "";
```

```java
    /*
     * Membuka koneksi ke database
     * */
    public Connection buatKoneksi(){
        try {
            Class.forName(driver);
            con = DriverManager.getConnection(url, user, pass);
        } catch (SQLException ex) {
            JOptionPane.showMessageDialog(null, "Ada masalah dengan koneksi ke database.\n" +
                "Pastikan database sudah aktif.");
        } catch (ClassNotFoundException ex) {
            JOptionPane.showMessageDialog(null, "Driver tidak sesuai");
        }
        return con;
    }

    public Connection buatKoneksi2(){
        try {
            DriverManager.registerDriver(new com.mysql.jdbc.Driver());
```

```java
        con = (Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306", "root", "");

    } catch (SQLException ex) {

        JOptionPane.showMessageDialog(null, "Ada masalah dengan
koneksi ke database.\n" +

            "Pastikan database sudah aktif.");

    }

    return con;

}


/*

 * Menutup koneksi ke database.

 * */
public void tutupKoneksi(){

    try{

        if (rs!=null) rs.close();

        if(st != null) st.close();

        if(con!=null) con.close();

    }catch(Exception e){

        e.getMessage();
```

```
        }

    }


}
```

```
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.database;


/**

 *

*/

public class Session {

    public static String username;

}
```

```java
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
package hudan.pos.database;

import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.util.logging.Level;
import java.util.logging.Logger;

/**
 *
 * @author HudanPurnomo
 */
public class Starter {

    private String databaseName;
```

```java
    public Starter(String databaseName) {

        this.databaseName = databaseName;

    }


    public Starter() {

        databaseName = "POS";

    }


    public void createDB(){

        Connection con = new DataConnection().buatKoneksi2();

        try {

            PreparedStatement ps = con.prepareStatement("grant all privileges
on xxx.* to 'xxx' identified by 'c'");

            ps.execute();

        } catch (SQLException ex) {

            Logger.getLogger(Starter.class.getName()).log(Level.SEVERE,
null, ex);

        }

    }
```

```java
    public void givePrivilege(){

        Connection con = new DataConnection().buatKoneksi2();

        try {

            PreparedStatement ps = con.prepareStatement("grant all privileges
on xxx.* to 'xxx' identified by 'c'");

            ps.execute();

        } catch (SQLException ex) {

            Logger.getLogger(Starter.class.getName()).log(Level.SEVERE,
null, ex);

        }

    }


}
```

Barang java

```java
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.entity;
```

```java
/**
 *
 */
public class Barang {
    private int id;
    private String nama;
    private int jumlah;
    private double hargaBeli;
    private double hargaJual;

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    public int getJumlah() {
```

```java
        return jumlah;

    }


    public void setJumlah(int jumlah) {

        this.jumlah = jumlah;

    }


    public String getNama() {

        return nama;

    }


    public void setNama(String nama) {

        this.nama = nama;

    }


    public double getHargaBeli() {

        return hargaBeli;

    }


    public void setHargaBeli(double hargaBeli) {
```

```java
        this.hargaBeli = hargaBeli;

    }


    public double getHargaJual() {

        return hargaJual;

    }


    public void setHargaJual(double hargaJual) {

        this.hargaJual = hargaJual;

    }


}
```

Login java

```java
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.entity;
```

```java
/**
 *
 */
public class Login {

    private String username;

    private String password;


    public String getPassword() {

        return password;

    }


    public void setPassword(String password) {

        this.password = password;

    }


    public String getUsername() {

        return username;

    }


    public String getUsername() {

        return username;

    }
```

```java
    public void setUsername(String username) {

        this.username = username;

    }

}
```

Pelanggan java

```java
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.entity;


/**

 *

 */

public class Pelanggan {

    private int id;

    private String nama;

    private String noHP;
```

```java
public int getId() {

   return id;

}


public void setId(int id) {

   this.id = id;

}


public String getNama() {

   return nama;

}


public void setNama(String nama) {

   this.nama = nama;

}


public String getNoHP() {

   return noHP;

}
```

```java
    public void setNoHP(String noHP) {

        this.noHP = noHP;

    }

}
```

Penjualan java

```java
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.entity;



import java.util.Date;



/**

 *

 * @author HudanPurnomo

 */
```

```java
public class Penjualan {

    private int idPenjualan;

    private Date tanggal;

    private Pelanggan pelanggan;


    public int getIdPenjualan() {

        return idPenjualan;

    }


    public void setIdPenjualan(int idPenjualan) {

        this.idPenjualan = idPenjualan;

    }


    public Pelanggan getPelanggan() {

        return pelanggan;

    }


    public void setPelanggan(Pelanggan pelanggan) {

        this.pelanggan = pelanggan;

    }
```

```java
    public Date getTanggal() {

        return tanggal;

    }


    public void setTanggal(Date tanggal) {

        this.tanggal = tanggal;

    }

}
```

Penjualan barang java

```java
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.entity;


/**

 *

 */
```

```java
public class PenjualanBarang {

    private int idPenjBrg;

    private Penjualan penjualan;

    private Barang barang;

    private int jumlah;

    private double diskon;//diskon adalah nilai dalam rupiah


    public double getDiskon() {

        return diskon;

    }


    public void setDiskon(double diskon) {

        this.diskon = diskon;

    }


    public int getJumlah() {

        return jumlah;

    }


    public void setJumlah(int jumlah) {
```

```java
        this.jumlah = jumlah;

    }


    public int getIdPenjBrg() {

        return idPenjBrg;

    }


    public void setIdPenjBrg(int idPenjBrg) {

        this.idPenjBrg = idPenjBrg;

    }


    public Penjualan getPenjualan() {

        return penjualan;

    }


    public void setPenjualan(Penjualan penjualan) {

        this.penjualan = penjualan;

    }


    public Barang getBarang() {
```

```java
        return barang;

    }


    public void setBarang(Barang barang) {

        this.barang = barang;

    }


}
```

formattedxtfieldDemo java

```
package components;


import java.awt.*;

import java.awt.event.*;


import javax.swing.*;

import javax.swing.event.*;

import javax.swing.text.*;


import java.beans.PropertyChangeListener;

import java.beans.PropertyChangeEvent;
```

```java
import java.text.*;


/**

 * FormattedTextFieldDemo.java requires no other files.

 *

 * It implements a mortgage calculator that uses four

 * JFormattedTextFields.

 */
public class FormattedTextFieldDemo extends JPanel

                     implements PropertyChangeListener {

    //Values for the fields

    private double amount = 100000;

    private double rate = 7.5;  //7.5%

    private int numPeriods = 30;


    //Labels to identify the fields

    private JLabel amountLabel;

    private JLabel rateLabel;

    private JLabel numPeriodsLabel;
```

```java
    private JLabel paymentLabel;


    //Strings for the labels

    private static String amountString = "Loan Amount: ";

    private static String rateString = "APR (%): ";

    private static String numPeriodsString = "Years: ";

    private static String paymentString = "Monthly Payment: ";


    //Fields for data entry

    private JFormattedTextField amountField;

    private JFormattedTextField rateField;

    private JFormattedTextField numPeriodsField;

    private JFormattedTextField paymentField;


    //Formats to format and parse numbers

    private NumberFormat amountFormat;

    private NumberFormat percentFormat;

    private NumberFormat paymentFormat;


    public FormattedTextFieldDemo() {
```

```
super(new BorderLayout());

setUpFormats();

double payment = computePayment(amount,

                  rate,

                  numPeriods);


//Create the labels.

amountLabel = new JLabel(amountString);

rateLabel = new JLabel(rateString);

numPeriodsLabel = new JLabel(numPeriodsString);

paymentLabel = new JLabel(paymentString);


//Create the text fields and set them up.

amountField = new JFormattedTextField(amountFormat);

amountField.setValue(new Double(amount));

amountField.setColumns(10);

amountField.addPropertyChangeListener("value", this);


rateField = new JFormattedTextField(percentFormat);

rateField.setValue(new Double(rate));
```

```java
rateField.setColumns(10);

rateField.addPropertyChangeListener("value", this);


numPeriodsField = new JFormattedTextField();

numPeriodsField.setValue(new Integer(numPeriods));

numPeriodsField.setColumns(10);

numPeriodsField.addPropertyChangeListener("value", this);


paymentField = new JFormattedTextField(paymentFormat);

paymentField.setValue(new Double(payment));

paymentField.setColumns(10);

paymentField.setEditable(false);

paymentField.setForeground(Color.red);


//Tell accessibility tools about label/textfield pairs.

amountLabel.setLabelFor(amountField);

rateLabel.setLabelFor(rateField);

numPeriodsLabel.setLabelFor(numPeriodsField);

paymentLabel.setLabelFor(paymentField);
```

```java
//Lay out the labels in a panel.
JPanel labelPane = new JPanel(new GridLayout(0,1));
labelPane.add(amountLabel);
labelPane.add(rateLabel);
labelPane.add(numPeriodsLabel);
labelPane.add(paymentLabel);

//Layout the text fields in a panel.
JPanel fieldPane = new JPanel(new GridLayout(0,1));
fieldPane.add(amountField);
fieldPane.add(rateField);
fieldPane.add(numPeriodsField);
fieldPane.add(paymentField);

//Put the panels in this panel, labels on left,
//text fields on right.
setBorder(BorderFactory.createEmptyBorder(20, 20, 20, 20));
add(labelPane, BorderLayout.CENTER);
add(fieldPane, BorderLayout.LINE_END);
}
```

```java
/** Called when a field's "value" property changes. */
public void propertyChange(PropertyChangeEvent e) {
    Object source = e.getSource();
    if (source == amountField) {
        amount = ((Number)amountField.getValue()).doubleValue();
    } else if (source == rateField) {
        rate = ((Number)rateField.getValue()).doubleValue();
    } else if (source == numPeriodsField) {
        numPeriods = ((Number)numPeriodsField.getValue()).intValue();
    }


    double payment = computePayment(amount, rate, numPeriods);
    paymentField.setValue(new Double(payment));
}


/**
 * Create the GUI and show it.  For thread safety,
 * this method should be invoked from the
 * event dispatch thread.
```

```
 */
private static void createAndShowGUI() {

    //Create and set up the window.

    JFrame frame = new JFrame("FormattedTextFieldDemo");

    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);


    //Add contents to the window.

    frame.add(new FormattedTextFieldDemo());


    //Display the window.

    frame.pack();

    frame.setVisible(true);

}


public static void main(String[] args) {

    System.out.println("hallo");

    //Schedule a job for the event dispatch thread:

    //creating and showing this application's GUI.

    SwingUtilities.invokeLater(new Runnable() {

        public void run() {
```

```java
        //Turn off metal's use of bold fonts

            UIManager.put("swing.boldMetal", Boolean.FALSE);

        createAndShowGUI();

    }

  });

}


//Compute the monthly payment based on the loan amount,

//APR, and length of loan.

double computePayment(double loanAmt, double rate, int numPeriods) {

  double I, partial1, denominator, answer;


  numPeriods *= 12;       //get number of months

  if (rate > 0.01) {

    I = rate / 100.0 / 12.0;        //get monthly rate from annual

    partial1 = Math.pow((1 + I), (0.0 - numPeriods));

    denominator = (1 - partial1) / I;

  } else { //rate ~= 0

    denominator = numPeriods;

  }
```

```java
        answer = (-1 * loanAmt) / denominator;

        return answer;

    }


    //Create and set up number formats. These objects also
    //parse numbers input by user.
    private void setUpFormats() {
        amountFormat = NumberFormat.getNumberInstance();


        percentFormat = NumberFormat.getNumberInstance();
        percentFormat.setMinimumFractionDigits(3);


        paymentFormat = NumberFormat.getCurrencyInstance();
    }
}
```

Hapus2 java

```java
/*
 * To change this template, choose Tools | Templates
```

```java
 * and open the template in the editor.

 */

package hudan.pos.ui;


import javax.swing.JOptionPane;


/**

 *

 * @author HudanPurnomo

 */

public class Hapus2 {

    public static void main (String Args[]){


//Deklarasi variable

String ANGKA;

String SATUAN;

String PULUHAN;

String RATUSAN;

int angka;

int satuan;
```

```
int puluhan;

int Puluhan;

int ratusan;


//memasukan sebuah angka dengan input dialog

ANGKA = JOptionPane.showInputDialog("MASUKAN BILANGAN [ 1...999 ] : ");


//mengkonversi angka dari string ke integer

angka = Integer.parseInt(ANGKA);


// Perhitungan memisahkan ratusan puluhan satuan

ratusan = angka / 100 ;

Puluhan = angka % 100 ;

puluhan = Puluhan / 10 ;

satuan = angka % 10 ;


//cetak nilai ratusan

if (angka < 1000 && angka > 0 ){

switch(ratusan){
```

```java
case 0 : break;

case 1 : System.out.print(" seratus ");break;

case 2 : System.out.print(" dua ");break;

case 3 : System.out.print(" tiga ");break;

case 4 : System.out.print(" empat ");break;

case 5 : System.out.print(" lima ");break;

case 6 : System.out.print(" enam ");break;

case 7 : System.out.print(" tujuh ");break;

case 8 : System.out.print(" delapan ");break;

case 9 : System.out.print(" sembilan ");break;

}


if(angka < 1000 && angka >= 200){

System.out.print("ratus ");

}


//cetak nilai puluhan

if (Puluhan == 11){

System.out.println(" sebelas");

}else if (angka >=20) {
```

```java
switch(puluhan){

case 0 : break;

case 2 : System.out.print("dua ");break;

case 3 : System.out.print("tiga ");break;

case 4 : System.out.print("empat ");break;

case 5 : System.out.print("lima ");break;

case 6 : System.out.print("enam ");break;

case 7 : System.out.print("tujuh ");break;

case 8 : System.out.print("delapan ");break;

case 9 : System.out.print("sembilan ");break;

}

}if (Puluhan == 10){

System.out.println("sepuluh ");

}


if(Puluhan < 100 && Puluhan >= 20){

System.out.print("puluh ");

}


if (Puluhan != 11){
```

```java
{

    //cetak nilai satuan
    switch(satuan){
    case 0 : break;
    case 1 : System.out.print("satu ");break;
    case 2 : System.out.print("dua ");break;
    case 3 : System.out.print("tiga ");break;
    case 4 : System.out.print("empat ");break;
    case 5 : System.out.print("lima ");break;
    case 6 : System.out.print("enam ");break;
    case 7 : System.out.print("tujuh ");break;
    case 8 : System.out.print("delapan ");break;
    case 9 : System.out.print("sembilan ");break;

    }

    }
}
if (Puluhan > 11 && Puluhan < 20){
```

```java
System.out.println("belas");

}


//menampilkan pesan kesalahan apabila kesalahan memasukan input

}else {

JOptionPane.showMessageDialog(null, "Input yang anda masukan diluar
jangkauan ( Out Of Bounds )");

angka = -1;

}



}
}
```

Home.java

```java
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */


/*
```

```java
 * Home.java
 *
 * Created on May 21, 2011, 4:52:59 PM
 */
package hudan.pos.ui;


/**
 *
 * @author HudanPurnomo
 */
public class Home extends javax.swing.JFrame {


    /** Creates new form Home */
    public Home() {
        initComponents();
    }



    /** This method is called from within the constructor to
     * initialize the form.
```

```java
 * 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() {


    jPanel1 = new javax.swing.JPanel();

    btnPenjualan = new javax.swing.JButton();

    btnBarang = new javax.swing.JButton();

    jButton5 = new javax.swing.JButton();

    jLabel1 = new javax.swing.JLabel();

    jLabel2 = new javax.swing.JLabel();



setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    setTitle("Point of Sale");

    setUndecorated(true);

    setResizable(false);
```

```java
        jPanel1.setBackground(new java.awt.Color(51, 51, 255));


        btnPenjualan.setBackground(new java.awt.Color(153, 255, 51));

        btnPenjualan.setFont(new java.awt.Font("Calibri", 1, 24)); // NOI18N

        btnPenjualan.setText("Penjualan");

        btnPenjualan.setCursor(new
java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

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

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

                btnPenjualanActionPerformed(evt);

            }

        });


        btnBarang.setBackground(new java.awt.Color(153, 255, 51));

        btnBarang.setFont(new java.awt.Font("Calibri", 1, 24)); // NOI18N

        btnBarang.setText("Barang");

        btnBarang.setCursor(new
java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

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

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

        btnBarangActionPerformed(evt);

    }

});


jButton5.setBackground(new java.awt.Color(153, 255, 51));

jButton5.setFont(new java.awt.Font("Calibri", 1, 24)); // NOI18N

jButton5.setText("Keluar");

jButton5.setCursor(new
java.awt.Cursor(java.awt.Cursor.HAND_CURSOR));

jButton5.addActionListener(new java.awt.event.ActionListener() {

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

        jButton5ActionPerformed(evt);

    }

});


jLabel1.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/hudan/pos/image/login.pn
g"))); // NOI18N


jLabel2.setFont(new java.awt.Font("Calibri", 1, 36)); // NOI18N
```

```java
jLabel2.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);

    jLabel2.setText("Toko ");


    javax.swing.GroupLayout jPanel1Layout = new
javax.swing.GroupLayout(jPanel1);

    jPanel1.setLayout(jPanel1Layout);

    jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.L
EADING)

        .addGroup(jPanel1Layout.createSequentialGroup()


.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.A
lignment.LEADING)


.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.A
lignment.TRAILING, false)

                .addGroup(jPanel1Layout.createSequentialGroup()

                    .addGap(21, 21, 21)

                    .addComponent(btnPenjualan,
javax.swing.GroupLayout.PREFERRED_SIZE, 192,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```java
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATE
D, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

                .addComponent(btnBarang,
javax.swing.GroupLayout.PREFERRED_SIZE, 192,
javax.swing.GroupLayout.PREFERRED_SIZE)

                .addGap(26, 26, 26)

                .addComponent(jButton5,
javax.swing.GroupLayout.PREFERRED_SIZE, 192,
javax.swing.GroupLayout.PREFERRED_SIZE))

                .addGroup(javax.swing.GroupLayout.Alignment.LEADING,
jPanel1Layout.createSequentialGroup()

                .addContainerGap()

                .addComponent(jLabel2,
javax.swing.GroupLayout.PREFERRED_SIZE, 644,
javax.swing.GroupLayout.PREFERRED_SIZE)))

            .addGroup(jPanel1Layout.createSequentialGroup()

                .addGap(270, 270, 270)

                .addComponent(jLabel1)))

        .addContainerGap(36, Short.MAX_VALUE))
    );

    jPanel1Layout.setVerticalGroup(
```

```java
jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1Layout.createSequentialGroup()
        .addGap(24, 24, 24)
        .addComponent(jLabel2)
        .addGap(18, 18, 18)
        .addComponent(jLabel1)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jButton5, javax.swing.GroupLayout.PREFERRED_SIZE, 111, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(btnPenjualan, javax.swing.GroupLayout.PREFERRED_SIZE, 111, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(btnBarang, javax.swing.GroupLayout.PREFERRED_SIZE, 111, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(58, 58, 58))
```

```
        );


        javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());

        getContentPane().setLayout(layout);

        layout.setHorizontalGroup(


layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)

            .addGroup(layout.createSequentialGroup()

                .addContainerGap()

                .addComponent(jPanel1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

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

        layout.setVerticalGroup(


layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADIN
G)

            .addGroup(layout.createSequentialGroup()
```

```
            .addGap(46, 46, 46)

            .addComponent(jPanel1,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

            .addContainerGap())

    );


    setSize(new java.awt.Dimension(674, 415));

    setLocationRelativeTo(null);

}// </editor-fold>


private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {

    System.exit(0);

}


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

    new Penjualan().setVisible(true);

    this.setVisible(false);

}
```

```java
    private void btnBarangActionPerformed(java.awt.event.ActionEvent evt)
{

        new MaintenanceBarang().setVisible(true);

        this.setVisible(false);

    }


    /**

     * @param args the command line arguments

     */

    public static void main(String args[]) {

        java.awt.EventQueue.invokeLater(new Runnable() {


            public void run() {

                new Home().setVisible(true);

            }

        });

    }

    // Variables declaration - do not modify

    private javax.swing.JButton btnBarang;

    private javax.swing.JButton btnPenjualan;
```

```java
    private javax.swing.JButton jButton5;

    private javax.swing.JLabel jLabel1;

    private javax.swing.JLabel jLabel2;

    private javax.swing.JPanel jPanel1;

    // End of variables declaration

}
```

Numberhelper.java

```java
/*

 * To change this template, choose Tools | Templates

 * and open the template in the editor.

 */

package hudan.pos.util;


import java.text.DecimalFormat;

import java.text.NumberFormat;

import java.util.Locale;


/**

 *
```

```java
 * @author HudanPurnomo
 */
public class NumberHelper {

    public static String thousandSparator(double value) {

        Locale loc = new Locale("de", "DE");

        String pattern = "###,###.###";

        NumberFormat nf = NumberFormat.getNumberInstance(loc);

        DecimalFormat df = (DecimalFormat)nf;

        df.applyPattern(pattern);

        String output = df.format(value);

        return output;

    }

}
```

BIODATA DIRI

Penulis bernama lengkap Muhammad Hudan Dardiri. Lahir di Kabupaten Gresik, Jawa Timur pada tanggal 08 Oktober 1993. Merupakan anak kedua dari empat bersaudara. Penulis lahir dari pasangan suami istri Bapak Mat Hakim dan Ibu Nur Azizah. Penulis sekarang bertempat tinggal di Jl. Embong Baru 2K Sembayat Kecamatan Manyar Kabupaten Gresik.

Penulis menyelesaikan pendidikan dasar di MI Hidayatul Mubtadi'in Desa Mojopuro Wetan Kecamatan Bungah Kabupaten Gresik, lulus pada tahun 2007. Lulus SMP pada tahun 2009 di SMP Nusantara Mojopuro Wetan Kecamatan Bungah Kabupaten Gresik. Lulus SMA pada tahun 2011 di SMA Nusantara Desa Mojopuro Wetan Kecamatan Bungah Kabupaten Gresik. Dan pada tahun 2011 sampai dengan penulisan Tugas Akhir ini penulis masih terdaftar sebagai Mahasiswa Program Diploma III di Universitas Muhammadiyah Surabaya.

ENDORSEMENT LETTER
096/PB-UMS/EL/V/2015

This letter is to certify that the abstract of the thesis below

Title   : Design Point of Sale Applications at Barokah Store

Student's name   : M. Hudan Dardiri

Reg. Number   : 20110335019

Department   : D3 Teknik Komputer

has been endorsed by Pusat Bahasa UMSurabaya for further approval by the examining committee of the faculty.

20 Mei 2015

Sailon Dedi Wijaya, S.Pd