1. Source Code Tugas Tambahan Dosen

* File praktikum.h

#ifndef PRAKTIKUM\_H\_INCLUDED

#define PRAKTIKUM\_H\_INCLUDED

#include <iostream>

struct catalog\_buku{

char nama\_barang[100],kota\_penjual[100];

int harga,stok;

};

struct jasa\_pengantar{

char nama\_jasa[100];

int tarif;

};

struct data\_pembayaran{

char nama\_bank[100];

int no\_rekening,jml\_transfer;

};

struct data\_pembelian{

catalog\_buku cbuku;

jasa\_pengantar jp;

int jml\_pembelian,total\_pembelian;

};

struct data\_pembeli{

data\_pembelian dpembelian;

data\_pembayaran dpembayaran;

char nama[100],alamat[100];

};

* File main.cpp

#include <iostream>

#include <stdlib.h>

#include "praktikum.h"

using namespace std;

struct node{

data\_pembeli dpembeli;

int nomor = 0;

node \*next;

node \*prev;

} \*head, \*tail, \*baru, \*after, \*letak;

int pilihan;

char ulang;

char nama\_barang[100];

int total = 0;

void init(){

head = tail = NULL;

}

void masuk(data\_pembeli dpembeli, int type){

baru = new node;

baru->dpembeli = dpembeli;

baru->nomor++;

baru->next = baru->prev = NULL;

if(head==NULL){

head = tail = baru;

}

else if(type == 1){

baru->next = head;

head->prev = baru;

head = baru;

}

else if(type == 2){

tail->next = baru;

baru->prev = tail;

tail = baru;

}

total++;

cout<<"Data berhasil di tambahkan ";

}

void masuk\_tengah(data\_pembeli dpembeli, int nomor){

int letak,i;

letak = head->nomor;

baru = new node;

baru->nomor++;

baru->dpembeli = dpembeli;

if(head==NULL){

head = tail = baru;

}else{

after = head;

for(i=1;i<nomor;i++){

after = after->next;

}

if(i==nomor&&after->next==NULL){

tail->next = baru;

baru->prev = tail;

tail = baru;

} else {

baru->prev=after;

baru->next=after->next;

after->next->prev=baru;

after->next=baru;

}

}

total++;

}

void print(){

cout<<"Nama barang \t :"<<baru->dpembeli.dpembelian.cbuku.nama\_barang<<endl;

cout<<"Harga barang \t :"<<baru->dpembeli.dpembelian.cbuku.harga<<endl;

cout<<"Stok akhir \t :"<<baru->dpembeli.dpembelian.cbuku.stok<<endl;

cout<<"Kota Penjual \t :"<<baru->dpembeli.dpembelian.cbuku.kota\_penjual<<endl<<endl;

cout<<"========== Jasa Pengantar ==========="<<endl;

cout<<"Jasa \t\t :"<<baru->dpembeli.dpembelian.jp.nama\_jasa<<endl;

cout<<"Tarif \t\t :"<<baru->dpembeli.dpembelian.jp.tarif<<endl<<endl;

cout<<"========== Detail Pembelian ========="<<endl;

cout<<"Nama Pembeli \t :"<<baru->dpembeli.nama<<endl;

cout<<"Alamat Pembeli \t :"<<baru->dpembeli.alamat<<endl;

cout<<"Jumlah \t\t :"<<baru->dpembeli.dpembelian.jml\_pembelian<<endl;

cout<<"Total \t\t :"<<baru->dpembeli.dpembelian.total\_pembelian<<endl<<endl;

cout<<"========== Detail Pembayaran ========"<<endl;

cout<<"Nama bank \t :"<<baru->dpembeli.dpembayaran.nama\_bank<<endl;

cout<<"No rekening \t :"<<baru->dpembeli.dpembayaran.no\_rekening<<endl;

cout<<"Jumlah Transfer :"<<baru->dpembeli.dpembayaran.jml\_transfer<<endl;

}

void inputan(){

cout<<"Masukkan Nama Barang\t :";cin>>baru->dpembeli.dpembelian.cbuku.nama\_barang;

cout<<"Masukkan Harga:\t\t :";cin>>baru->dpembeli.dpembelian.cbuku.harga;

cout<<"Masukkan stok:\t\t :";cin>>baru->dpembeli.dpembelian.cbuku.stok;

cout<<"Masukkan Kota Penjual:\t :";cin>>baru->dpembeli.dpembelian.cbuku.kota\_penjual;

cout<<endl;

cout<<"---- Jasa Pengantar ----"<<endl;

cout<<"Masukkan jasa pengantar :";cin>>baru->dpembeli.dpembelian.jp.nama\_jasa;

cout<<"Masukkan tarif\t\t :";cin>>baru->dpembeli.dpembelian.jp.tarif;

cout<<endl;

cout<<"---- Detail pembelian ----"<<endl;

cout<<"Nama pembeli \t\t :";cin>>baru->dpembeli.nama;

cout<<"Alamat pembeli \t\t :";cin>>baru->dpembeli.alamat;

cout<<"Jumlah pembelian \t :";cin>>baru->dpembeli.dpembelian.jml\_pembelian;

cout<<endl;

cout<<"---- Detail pembayaran ----"<<endl;

cout<<"Nama bank :";cin>>baru->dpembeli.dpembayaran.nama\_bank;

cout<<"No rekening :";cin>>baru->dpembeli.dpembayaran.no\_rekening;

cout<<"Jumlah Transfer :";cin>>baru->dpembeli.dpembayaran.jml\_transfer;

cout<<endl<<endl;

baru->dpembeli.dpembelian.total\_pembelian = baru->dpembeli.dpembelian.jml\_pembelian \* baru->dpembeli.dpembelian.cbuku.harga;

baru->dpembeli.dpembelian.cbuku.stok = baru->dpembeli.dpembelian.cbuku.stok - baru->dpembeli.dpembelian.jml\_pembelian;

}

void masukkanDepan(){

cout<<endl;

baru = new node;

inputan();

masuk(baru->dpembeli, 1);

}

void masukkanBelakang(){

cout<<endl;

baru = new node;

inputan();

masuk(baru->dpembeli, 2);

}

void masukTengah(){

cout<<endl;

baru = new node;

cout<<"Masukkan data setelah nomor = ";

cin>>baru->nomor;

cout<<"========= Data ================"<<endl;

inputan();

masuk\_tengah(baru->dpembeli, baru->nomor);

}

void tampil(){

cout<<endl;

int i=0;

baru = head;

cout<<"==================================================================="<<endl;

while(baru!=NULL){

i++;

print();

baru=baru->next;

cout<<"===============================[ "<<i<<" ]==============================="<<endl;

}

}

void menu(){

cout<<"Total data = "<<total<<endl;

cout<<"--- Menu --- "<<endl;

cout<<"1. Insert Depan "<<endl;

cout<<"2. Insert Belakang "<<endl;

cout<<"3. Insert Tengah"<<endl;

cout<<"4. Lihat Data "<<endl;

cout<<"Masukkan Pilihan = ";

cin>>pilihan;

if(pilihan == 1){

masukkanDepan();

}

else if(pilihan == 2){

masukkanBelakang();

}

else if(pilihan == 3){

masukTengah();

}

else if(pilihan == 4){

tampil();

}

else{

cout<<"Pilihan salah "<<endl;

}

}

int main(){

init();

do {

menu();

cout<<"Apakah anda ingin mengulang ? ";

cin>>ulang;

system("cls");

} while (ulang == 'y' || ulang == 'Y');

}

