#include<stdio.h>

#include<stdlib.h>

#include<time.h>

#include<string.h>

#define GOTOXY(x,y) printf("\033[%d,%df",y,x)

void delay(int time)

{

int milli = 1000\* time;

clock();

while(clock()<milli);

}

void input();

void writefile();

void search();

void output();

struct date {

int month;

int day;

int year;

};

struct account{

int number;

char name[100];

int acct\_no ;

float mobile\_no;

char street[100];

char city[100];

char acct\_type;

float oldbalance;

float newbalance;

float payment;

struct date lastpayment;

}customer;

int tl,sl,ts ;

void main()

{

int i,n;

char ch;

system("clear");

printf(" CUSTOMER BILLING SYSTEM :\n\n");

printf("=============================\n");

printf("l: ADD account on list \n");

printf("2: SEARCH customer account \n");

printf("3: EXIT\n");

printf("=============================\n");

do

{

printf("\n select what you want to do ??\n");

ch=getchar();

}while(ch<='0'||ch>'3');

switch (ch)

{

case '1' :

system("clear");

printf("\n how many customer acounts : ");

scanf("%d",&n);

getchar();

for(i=0;i<n;i++)

{

input();

if (customer.payment > 0.0)

customer.acct\_type=(customer.payment <customer.oldbalance)? '0':'D';

else

customer.acct\_type=(customer.oldbalance >0)?'D':'C';

customer.newbalance=customer.oldbalance-customer.payment;

writefile();

}

main();

case '2':

getchar();

system("clear");

printf("search by what ?? \n\n");

printf("l:--------- search by customer number \n");

printf("2:--------- search by customer name \n");

search();

ch =getchar();

main();

case '3':

system("clear");

delay(500);

GOTOXY(10,25);

printf("A PROJECT BY SHRAVYA,BHARGAVI,SOWMYA");

delay(1500);

exit(1);

}

}

void input()

{

FILE \*fp=fopen("file.txt","ab+");

fseek (fp,0,SEEK\_END);

tl=ftell(fp);

sl=sizeof(customer);

ts=tl/sl;

fseek(fp,(ts-1)\*sl,SEEK\_SET);

fread(&customer,sizeof(customer),1,fp);

printf("\ncustomer no:%d\n",++customer.number);

fclose(fp);

printf("\n Account number:");

scanf("%d",&customer.acct\_no);

getchar();

printf("\n Name:");

scanf("%s",customer.name);

getchar();

printf("\n mobile no:");

scanf("%f",&customer.mobile\_no);

getchar();

printf("\n Street:");

scanf("%s",customer.street);

getchar();

printf("\n City:");

scanf("%s",customer.city);

getchar();

printf("\n Previous balance:");

scanf("%f",&customer.oldbalance);

getchar();

printf("\n Current payment:");

scanf("%f",&customer.payment);

getchar();

printf(" Payment date(mm/dd/yyyy):");

scanf("%d/%d/%d",&customer.lastpayment.month,&customer.lastpayment.day,&customer.lastpayment.year);

getchar();

}

void writefile()

{

FILE \*fp;

fp=fopen("file.txt","ab+");

fwrite(&customer,sizeof(customer),1,fp);

fclose(fp);

return;

}

void search()

{

char ch;

char nam[100];

int n,i,m=1;

FILE \*fp;

fp=fopen("file.txt","r+");

do

{

printf("\n enter your choice: ");

ch=getchar();

}while(ch!='1' && ch!='2');

switch(ch)

{

case '1':

fseek(fp,0,SEEK\_END);

tl=ftell(fp);

sl=sizeof(customer);

ts=tl/sl;

do

{

printf("\n choose customer number:");

scanf("%d",&n);

if(n<=0 || n>ts)

printf("\n enter correct \n");

else

{

fseek(fp,(n-1)\*sl,SEEK\_SET);

fread(&customer,sl,1,fp);

output();

}

printf("\n\nagain?(y/n)");

ch=getchar();

}while(ch=='y');

fclose(fp);

break;

case '2':

fseek(fp,0,SEEK\_END);

tl=ftell(fp);

sl=sizeof(customer);

ts=tl/sl;

fseek(fp,(ts-1)\*sl,SEEK\_SET);

fread(&customer,sizeof(customer),1,fp);

n=customer.number;

do

{

printf("\n enter the name:");

scanf("%s",nam);

fseek(fp,0,SEEK\_SET);

for(i=1;i<=n;i++)

{

fread(&customer,sizeof(customer),1,fp);

if(strcmp(customer.name,nam)==0)

{

output();

m=0;

break;

}

}

if(m!=0)

printf("\n\n doesn't exist\n");

printf("\n another?? (y/n)");

ch=getchar();

}while(ch=='y');

fclose(fp);

}

return;

}

void output()

{

printf("\n\n Customer no :%d \n",customer.number);

printf(" Name :%s \n",customer.name);

printf(" Mobile no :%.f \n",customer.mobile\_no);

printf(" Account number :%d \n",customer.acct\_no);

printf(" Street :%s \n",customer.street);

printf(" City :%s \n",customer.city);

printf(" Old balance :%.2f \n",customer.oldbalance);

printf(" Current payment:%.2f \n",customer.payment);

printf(" New balance :%.2f \n",customer.newbalance);

printf(" Payment date :%d/%d/%d \n \n",customer.lastpayment.month,customer.lastpayment.day,customer.lastpayment.year);

printf(" Account status :");

switch(customer.acct\_type)

{

case 'C':

printf("CURRENT \n\n");

break;

case '0':

printf("OVERDUE \n\n");

break;

case 'D':

printf("DELINQUENT \n\n");

break;

default:

printf("ERROR\n\n");

}

return;

}