#include<stdio.h>

#include<conio.h>

#include<string.h>

#include<windows.h>

#include<ctype.h>

int i,j;

int main\_exit;

void foredelay(void);

void new\_acc(void);

void edit(void);

void transact(void);

void erase(void);

void see(void);

void close(void);

void view\_list(void);

void menu(void);

int login(void);

COORD coord = {0, 0};

int s;

struct date{

int month,day,year;

};

struct {

char name[60];

int acc\_no,age;

char address[60];

char citizenship[15];

double phone;

char acc\_type[10];

float amt;

struct date dob;

struct date deposit;

struct date withdraw;

}add,upd,check,rem,transaction;

void fordelay(int j)

{ int i,k;

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

k=i;

}

main()

{

int welcome(void);

login();

menu();

}

void close(void)

{

printf("\n\n\n\nThanks for visting!");

}

void menu(void)

{ int choice;

system("cls");

system("color 70");

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

printf("\n\n\t\t\t\t CUSTOMER ACCOUNT CENTER");

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

printf("\n\n\n\t\t\t\xB2\xB2\xB2\xB2\xB2\xB2\xB2 MAIN MENU \xB2\xB2\xB2\xB2\xB2\xB2\xB2");

printf("\n\t\t\t1.Add new account.\n");

printf("\t\t\t2.Modify account\n");

printf("\t\t\t3.Transactions.\n");

printf("\t\t\t4.Check the details of existing account.\n");

printf("\t\t\t5.Deleting account.\n");

printf("\t\t\t6.View.\n");

printf("\t\t\t7.Exit.\n");

printf("\n\n\n\n\n\t\t Enter your choice[1-7]:");

scanf("%d",&choice);

system("cls");

switch(choice)

{

case 1:new\_acc();

break;

case 2:edit();

break;

case 3:transact();

break;

case 4:see();

break;

case 5:erase();

break;

case 6:view\_list();

break;

case 7:close();

break;

}

}

int login()

{

system("cls");

char pass[10],password[10]="password";

printf("\n\n\t\tEnter the password to login:");

scanf("%s",pass);

if (strcmp(pass,password)==0)

{printf("\n\n\n\n\n\t\t\Password Match!\n\n\n\n\n\n\t\nLOADING");

for(i=0;i<=6;i++)

{

fordelay(100000000);

}

system("cls");

menu();

}

else

{ printf("\n\nWrong password!!\a\a\a");

login\_try:

printf("\nEnter 1 to try again and 0 to exit:");

scanf("%d",&main\_exit);

if (main\_exit==1)

{

system("cls");

main();

}

else if (main\_exit==0)

{

system("cls");

close();}

else

{printf("\nInvalid!");

fordelay(1000000000);

system("cls");

goto login\_try;}

}

return 0;

}

float interest(float t,float amount,int rate){

float SI;

SI=(rate\*t\*amount)/100.0;

return (SI);

}

void new\_acc()

{

int choice;

FILE \*ptr;

ptr=fopen("E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat","a+");

account\_no:

system("cls");

printf("\n\n\nEnter today's date(mm/dd/yyyy):");

scanf("%d/%d/%d",&add.deposit.month,&add.deposit.day,&add.deposit.year);

printf("\nEnter the account number:");

scanf("%d",&check.acc\_no);

while(fscanf(ptr,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",&add.acc\_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.phone,add.acc\_type,&add.amt,&add.deposit.month,&add.deposit.day,&add.deposit.year)!=EOF)

{

if (check.acc\_no==add.acc\_no)

{printf("Account no. already in use!");

fordelay(1000000000);

goto account\_no;

}

}

add.acc\_no=check.acc\_no;

printf("\nEnter the name:");

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

printf("\nEnter the date of birth(mm/dd/yyyy):");

scanf("%d/%d/%d",&add.dob.month,&add.dob.day,&add.dob.year);

printf("\nEnter the age:");

scanf("%d",&add.age);

printf("\nEnter the address:");

scanf("%s",add.address);

printf("\nEnter the citizenship number:");

scanf("%s",add.citizenship);

printf("\nEnter the phone number: ");

scanf("%lf",&add.phone);

printf("\nEnter the amount to deposit:$");

scanf("%d",&add.amt);

printf("\nType of account:\n\t1.Saving\n\t2.Current\n\t3.Fixed1(for 1 year)\n\t4.Fixed2(for 2 years)\n\t5.Fixed3(for 3 years)\n\n\tEnter your choice[1-5]:");

scanf("%s",add.acc\_type);

fprintf(ptr,"%d %s %d/%d/%d %d %s %s %f %s %f %d/%d/%d\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.phone,add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

fclose(ptr);

printf("\nAccount created successfully!");

add\_invalid:

printf("\n\n\n\t\tEnter 1 to go to the main menu and 0 to exit:");

scanf("%d",&main\_exit);

system("cls");

if (main\_exit==1)

menu();

else if(main\_exit==0)

close();

else

{

printf("\nInvalid!\a");

goto add\_invalid;

}

}

void view\_list()

{

FILE \*view;

view=fopen("E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat","r");

int test=0;

system("cls");

printf("\nACC. NO.\tNAME\t\t\tADDRESS\t\t\tPHONE\n");

while(fscanf(view,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc\_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.phone,add.acc\_type,&add.amt,&add.deposit.month,&add.deposit.day,&add.deposit.year)!=EOF)

{

printf("\n%6d\t %10s\t\t\t%10s\t\t%.0lf",add.acc\_no,add.name,add.address,add.phone);

test++;

}

fclose(view);

if (test==0)

{ system("cls");

printf("\nNO RECORDS!!\n");}

view\_list\_invalid:

printf("\n\nEnter 1 to go to the main menu and 0 to exit:");

scanf("%d",&main\_exit);

system("cls");

if (main\_exit==1)

menu();

else if(main\_exit==0)

close();

else

{

printf("\nInvalid!\a");

goto view\_list\_invalid;

}

}

void edit(void)

{

int choice,test=0;

FILE \*old,\*newrec;

old=fopen("E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat","r");

newrec=fopen("new.dat","w");

printf("\nEnter the account no. of the customer whose info you want to change:");

scanf("%d",&upd.acc\_no);

while(fscanf(old,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc\_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.phone,add.acc\_type,&add.amt,&add.deposit.month,&add.deposit.day,&add.deposit.year)!=EOF)

{

if (add.acc\_no==upd.acc\_no)

{ test=1;

printf("\nWhich information do you want to change?\n1.Address\n2.Phone\n\nEnter your choice(1 for address and 2 for phone):");

scanf("%d",&choice);

system("cls");

if(choice==1)

{printf("Enter the new address:");

scanf("%s",upd.address);

fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,upd.address,add.citizenship,add.phone,add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

system("cls");

printf("Changes saved!");

}

else if(choice==2)

{

printf("Enter the new phone number:");

scanf("%lf",&upd.phone);

fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,upd.phone,add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

system("cls");

printf("Changes saved!");

}

}

else

fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.phone,add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

}

fclose(old);

fclose(newrec);

remove("E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat");

rename("E:\\Assingment\\Assingment\\1st semester\\CPG102\\new.dat","E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat");

if(test!=1)

{ system("cls");

printf("\nRecord not found!!\a\a\a");

edit\_invalid:

printf("\nEnter 0 to try again,1 to return to main menu and 2 to exit:");

scanf("%d",&main\_exit);

system("cls");

if (main\_exit==1)

menu();

else if (main\_exit==2)

close();

else if(main\_exit==0)

edit();

else

{printf("\nInvalid!\a");

goto edit\_invalid;}

}

else

{printf("\n\n\nEnter 1 to go to the main menu and 0 to exit:");

scanf("%d",&main\_exit);

system("cls");

if (main\_exit==1)

menu();

else

close();

}

}

void transact(void)

{ int choice,test=0;

FILE \*old,\*newrec;

old=fopen("E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat","r");

newrec=fopen("E:\\Assingment\\Assingment\\1st semester\\CPG102\\new.dat","w");

printf("Enter the account no. of the customer:");

scanf("%d",&transaction.acc\_no);

while (fscanf(old,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc\_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.phone,add.acc\_type,&add.amt,&add.deposit.month,&add.deposit.day,&add.deposit.year)!=EOF)

{

if(add.acc\_no==transaction.acc\_no)

{ test=1;

if(strcmpi(add.acc\_type,"fixed1")==0||strcmpi(add.acc\_type,"fixed2")==0||strcmpi(add.acc\_type,"fixed3")==0)

{

printf("\a\a\a\n\nYOU CANNOT DEPOSIT OR WITHDRAW CASH IN FIXED ACCOUNTS!!!!!");

fordelay(1000000000);

system("cls");

menu();

}

printf("\n\nDo you want to\n1.Deposit\n2.Withdraw?\n\nEnter your choice(1 for deposit and 2 for withdraw):");

scanf("%d",&choice);

if (choice==1)

{

printf("Enter the amount you want to deposit:$ ");

scanf("%f",&transaction.amt);

add.amt+=transaction.amt;

fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.phone,add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

printf("\n\nDeposited successfully!");

}

else

{

printf("Enter the amount you want to withdraw:$ ");

scanf("%f",&transaction.amt);

add.amt-=transaction.amt;

fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.phone,add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

printf("\n\nWithdrawn successfully!");

}

}

else

{

fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.phone,add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

}

}

fclose(old);

fclose(newrec);

remove("E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat");

rename("E:\\Assingment\\Assingment\\1st semester\\CPG102\\new.dat","E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat");

if(test!=1)

{

printf("\n\nRecord not found!!");

transact\_invalid:

printf("\n\n\nEnter 0 to try again,1 to return to main menu and 2 to exit:");

scanf("%d",&main\_exit);

system("cls");

if (main\_exit==0)

transact();

else if (main\_exit==1)

menu();

else if (main\_exit==2)

close();

else

{

printf("\nInvalid!");

goto transact\_invalid;

}

}

else

{

printf("\nEnter 1 to go to the main menu and 0 to exit:");

scanf("%d",&main\_exit);

system("cls");

if (main\_exit==1)

menu();

else

close();

}

}

void erase(void)

{

FILE \*old,\*newrec;

int test=0;

old=fopen("E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat","r");

newrec=fopen("E:\\Assingment\\Assingment\\1st semester\\CPG10\\2new.dat","w");

printf("Enter the account no. of the customer you want to delete:");

scanf("%d",&rem.acc\_no);

while (fscanf(old,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc\_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.phone,add.acc\_type,&add.amt,&add.deposit.month,&add.deposit.day,&add.deposit.year)!=EOF)

{

if(add.acc\_no!=rem.acc\_no)

fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.phone,add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

else

{test++;

printf("\nRecord deleted successfully!\n");

}

}

fclose(old);

fclose(newrec);

remove("E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat");

rename("E:\\Assingment\\Assingment\\1st semester\\CPG102\\new.dat","E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat");

if(test==0)

{

printf("\nRecord not found!!\a\a\a");

erase\_invalid:

printf("\nEnter 0 to try again,1 to return to main menu and 2 to exit:");

scanf("%d",&main\_exit);

if (main\_exit==1)

menu();

else if (main\_exit==2)

close();

else if(main\_exit==0)

erase();

else

{printf("\nInvalid!\a");

goto erase\_invalid;}

}

else

{printf("\nEnter 1 to go to the main menu and 0 to exit:");

scanf("%d",&main\_exit);

system("cls");

if (main\_exit==1)

menu();

else

close();

}

}

void see(void)

{

FILE \*ptr;

int test=0,rate;

int choice;

float time;

float intrst;

ptr=fopen("E:\\Assingment\\Assingment\\1st semester\\CPG102\\record.dat","r");

printf("Do you want to check by\n1.Account no\n2.Name\nEnter your choice:");

scanf("%d",&choice);

if (choice==1)

{ printf("Enter the account number:");

scanf("%d",&check.acc\_no);

while (fscanf(ptr,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc\_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.phone,add.acc\_type,&add.amt,&add.deposit.month,&add.deposit.day,&add.deposit.year)!=EOF)

{

if(add.acc\_no==check.acc\_no)

{ system("cls");

test=1;

printf("\nAccount NO.:%d\nName:%s \nDOB:%d/%d/%d \nAge:%d \nAddress:%s \nCitizenship No:%s \nPhone number:%.0lf \nType Of Account:%s \nAmount deposited:$ %.2f \nDate Of Deposit:%d/%d/%d\n\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.phone,

add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

if(strcmpi(add.acc\_type,"fixed1")==0)

{

time=1.0;

rate=9;

intrst=interest(time,add.amt,rate);

printf("\n\nYou will get $%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+1);

}

else if(strcmpi(add.acc\_type,"fixed2")==0)

{

time=2.0;

rate=11;

intrst=interest(time,add.amt,rate);

printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+2);

}

else if(strcmpi(add.acc\_type,"fixed3")==0)

{

time=3.0;

rate=13;

intrst=interest(time,add.amt,rate);

printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+3);

}

else if(strcmpi(add.acc\_type,"saving")==0)

{

time=(1.0/12.0);

rate=8;

intrst=interest(time,add.amt,rate);

printf("\n\nYou will get $.%.2f as interest on %d of every month",intrst,add.deposit.day);

}

else if(strcmpi(add.acc\_type,"current")==0)

{

printf("\n\nYou will get no interest\a\a");

}

}

}

}

else if (choice==2)

{ printf("Enter the name:");

scanf("%s",&check.name);

while (fscanf(ptr,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc\_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.phone,add.acc\_type,&add.amt,&add.deposit.month,&add.deposit.day,&add.deposit.year)!=EOF)

{

if(strcmpi(add.name,check.name)==0)

{ system("cls");

test=1;

printf("\nAccount No.:%d\nName:%s \nDOB:%d/%d/%d \nAge:%d \nAddress:%s \nCitizenship No:%s \nPhone number:%.0lf \nType Of Account:%s \nAmount deposited:$%.2f \nDate Of Deposit:%d/%d/%d\n\n",add.acc\_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.phone,

add.acc\_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);

if(strcmpi(add.acc\_type,"fixed1")==0)

{

time=1.0;

rate=9;

intrst=interest(time,add.amt,rate);

printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+1);

}

else if(strcmpi(add.acc\_type,"fixed2")==0)

{

time=2.0;

rate=11;

intrst=interest(time,add.amt,rate);

printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+2);

}

else if(strcmpi(add.acc\_type,"fixed3")==0)

{

time=3.0;

rate=13;

intrst=interest(time,add.amt,rate);

printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+3);

}

else if(strcmpi(add.acc\_type,"saving")==0)

{

time=(1.0/12.0);

rate=8;

intrst=interest(time,add.amt,rate);

printf("\n\nYou will get $.%.2f as interest on %d of every month",intrst,add.deposit.day);

}

else if(strcmpi(add.acc\_type,"current")==0)

{

printf("\n\nYou will get no interest\a\a");

}

}

}

}

fclose(ptr);

if(test!=1)

{ system("cls");

printf("\nRecord not found!!\a\a\a");

see\_invalid:

printf("\nEnter 0 to try again,1 to return to main menu and 2 to exit:");

scanf("%d",&main\_exit);

system("cls");

if (main\_exit==1)

menu();

else if (main\_exit==2)

close();

else if(main\_exit==0)

see();

else

{

system("cls");

printf("\nInvalid!\a");

goto see\_invalid;}

}

else

{printf("\nEnter 1 to go to the main menu and 0 to exit:");

scanf("%d",&main\_exit);}

if (main\_exit==1)

{

system("cls");

menu();

}

else

{

system("cls");

close();

}

}