



#### MINI PROJECT ON BANKING MANAGEMENT SYSTEM

**Problem Statement:** The bank management system project abstract must answer or address the needs of every issue that happen in bank management. These issues could be lacking security in manual managing of bank accounts or to address the inefficient banking transactions online. These problems were just an example of a bank management system that should be answered.

**Abstract:** The bank management system project is a program that keeps track of a client's bank account. This project demonstrates the operation of a banking account system and covers the essential functions of bank management software. It develops a project for resolving a customer's financial applications in a banking environment to meet the needs of an end banking user by providing multiple ways to complete banking chores. Additionally, this project is to provide additional features to the user's workspace that are not available in a traditional banking project. The project's bank management system is built on cutting-edge technologies. This project's main goal is to create software for a bank account management system. This project was designed to make it simple and quick to complete previously impossible processes with manual systems which are now possible with this software.

# **Bank Management System Project Proposal**

The **bank management system project proposal** states the solution and the problems faced by bank management. It should contain the project objectives, scope, and description.

**Project Description**: The Bank Management System (BMS) is a web-based tool that is used to reimburse financial institutions for services rendered to the Bureau of the Fiscal Service. In addition, BMS provides analytical tools for reviewing and approving salaries, budgets, and outflows.

**Project Objectives**: The goal of the bank management system project is to create an organic and optimal software of interaction between the various banking components. This is to maximize the profit of the banking mechanism. The implementation of competent bank management procedures is significantly responsible for the successful optimization of the bank's productivity and activities.

The project's main goal is to create an online banking system for banks. All banking work is done manually in the current system. To withdraw or deposit money, the user must go to the bank. Today, it is also hard to find account information for people who have accounts in the banking system.

**Project Scope:** Depending on the bank's policies, bank personnel and/or customers can utilize the Banking Management System. It can be utilized by multiple employees at the same time if they have the necessary permissions. Any web browser with a graphical interface can be used to access it.





## **Functions in the Bank Management System**

The source code for the Bank Management System for Customer Accounts is reasonably short and simple to comprehend. This C mini project is separated into many functions, most of which are connected to various financial operations. Some of the most critical functionalities are listed below to assist you better understand the project.

- **menu()** This function shows a menu or welcome screen that allows you to execute the various banking tasks listed below.
- **new acc**() Creates a new customer account using this function. It requests the customer's name, date of birth, citizenship number, address, and phone number, among other personal and financial information. You may pick from a variety of deposit accounts, including savings, current, fixed for 1 year, fixed for 2 years, and fixed for 3 years.
- **view list()** Displays a list of items. This feature allows you to access the customer's banking information, including the account number, name, address, and phone number supplied when the account was created.
- **edit**() This method has been used to update the address and phone number associated with a specific customer account.
- **transact**() This method allows you to deposit and withdraw funds from a specific client account.
- **remove**() A client account may be deleted using this service.
- **see**() is a function that allows you to look at something. Account number, name, date of birth, citizenship number, age, address, phone number, kind of account, amount deposited, and date of deposit are all shown in this feature. It also shows the amount of interest earned on a certain account type.

### **Source Code:**

```
//Banking Management system
#include<stdio.h>
#include<stdlib.h>
#include<windows.h>
int i,j;
int main_exit;
void menu();
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;
float interest(float t,float amount,int rate)
  float SI;
  SI=(rate*t*amount)/100.0;
  return (SI);
void fordelay(int j)
{ int i,k;
  for(i=0;i< j;i++)
     k=i;
void close(void)
  printf("\n\nThis C Mini Project is developed by VU-211FA14052!!!\n\n");
void new_acc()
```





```
int choice;
 FILE *ptr;
 ptr=fopen("record.dat","a+");
  account no:
  system("cls");
  printf("\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/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.mo
nth,&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("%f",&add.amt);
        printf("\nType of account:\n\t#Saving\n\t#Current\n\t#Fixed1(for 1 year)\n\t#Fixed2(for 2
years)\n\t#Fixed3(for 3 years)\n\n\tEnter your choice:");
        scanf("%s",add.acc_type);
        fprintf(ptr,"%d %s %d/%d/%d %d %s %s %lf %s %f
%d/%d/\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.a
ddress, add. citizenship, add. phone, add. acc\_type, add. amt, add. deposit. month, add. deposit. day, a discovered and acc\_type, add. amt, add. deposit. month, add. deposit. day, a discovered account of the contract of 
dd.deposit.year);
       fclose(ptr);
       printf("\nAccount created successfully!");
        add_invalid:
       printf("\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("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.mont
h,&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("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.mont
h,&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/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/\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.a
ddress,add.citizenship,upd.phone,add.acc_type,add.amt,add.deposit.month,add.deposit.day,a
dd.deposit.year);
         system("cls");
         printf("Changes saved!");
    else
       fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f
%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("record.dat");
  rename("new.dat","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)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("record.dat","r");
  newrec=fopen("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.mont
h,&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, "fixe
vpe, "fixed3")==0)
                          {
                                printf("\a\a\n\nYOU CANNOT DEPOSIT OR WITHDRAW CASH IN
FIXED ACCOUNTS!!!!!");
                                fordelay(100000000);
                                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:$");
                                scanf("%f",&transaction.amt);
                                add.amt+=transaction.amt:
                                fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f
%d/%d/\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.a
ddress,add.citizenship,add.phone,add.acc_type,add.amt,add.deposit.month,add.deposit.day,a
dd.deposit.year);
                                printf("\n\nDeposited successfully!");
                          }
                         else
                                printf("Enter the amount you want to withdraw:$");
                                scanf("%f",&transaction.amt);
                                add.amt-=transaction.amt:
                                fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f
%d/%d/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/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("record.dat");
 rename("new.dat","record.dat");
 if(test!=1)
    printf("\n\nRecord not found!!");
    transact_invalid:
   printf("\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("record.dat","r");
  newrec=fopen("new.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.mont
h,&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/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("record.dat");
rename("new.dat","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("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.mont
h,&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.dob.month, add.dob.day, add.dob.year, add.dob.year, add.dob.month, add.dob.day, add.dob.year, add.dob.year, add.dob.year, add.dob.day, add.dob.year, add.dob.year, add.dob.day, add.dob.year, add.dob.year
d.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("\nYou will get no interest\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.mont
h,&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,ad
d.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();
     }
```



int main()



```
void menu(void)
{ int choice;
  system("cls");
  system("color 6");
  printf("\n\n\t\tCUSTOMER ACCOUNT BANKING MANAGEMENT SYSTEM");
  xB2\xB2\xB2\xB2\xB2\xB2\xB2\;
  printf("\n\n\t\t1.Create new account\n\t\t2.Update information of existing
account\n\t\t3.For transactions\n\t\t4.Check the details of existing account\n\t\t5.Removing
existing account\n\t\t6. View customer's list\n\t7. Exit\n\n\n\n\tt Enter your choice:");
  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;
```





```
char pass[10],password[10]="bi52";
int i=0;
printf("\n\n\t\tEnter the password to login:");
scanf("%s",pass);
if (strcmp(pass,password)==0)
  {printf("\n\nPassword Match!\nLOADING");
  for(i=0;i<=6;i++)
     fordelay(100000000);
     printf(".");
     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();
```

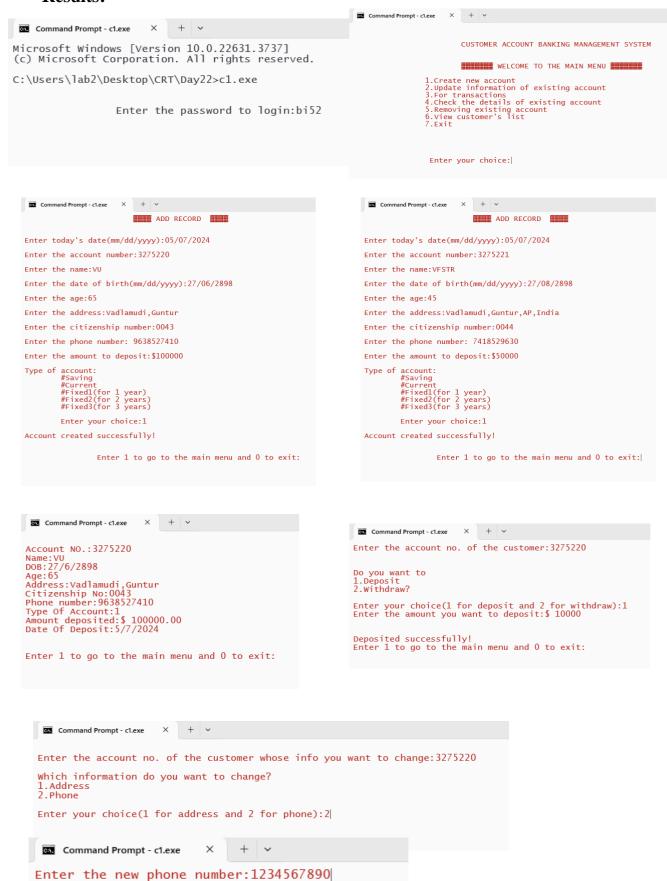








### **Results:**









Enter the account no. of the customer you want to delete: 3275221

Record deleted successfully!

Enter 1 to go to the main menu and 0 to exit:



