#### Introduction

- Project name: "The Phonebook Application"
- This project is written in C language. The concept of an array, strings, structures, file management and functions are often used in almost all functions in this project.
- "The Phonebook Application" is a very simple tool that helps the user to perform the functions like: Adding a new contact, View list of existing contacts, modifying a contact and searching a contact.
- Adding new items, viewing, editing and updating, searching for saved contacts and deleting data in the phonebook are the main features of The phonebook application.

\*\*\* Welcome to the Phone Book Application \*\*\*

|| MENU ||

- [1] Add New Contact
- [2] List of Contacts
- [3] Modify Contact
- [4] Search Contact
- [5] Delete Contact
- [6] EXIT

===========

Enter your Selection: \_

# The Phonebook Application Main Window

```
id newcontact()
 FILE *fp;
 system("cls");
 fp = fopen("record.txt","ab+");
 if(fp == NULL){
   printf("Error opening file");
 fflush(stdin);
 while(a=='y')
   printf("\n\nEnter details of Contact.\n");
   printf("\nEnter Name : ");
    gets(con.name);
   printf("\nEnter Mobile Number : ");
   gets(con.mobileNo);
   printf("\nEnter Father name : ");
   gets(con.fname):
    fflush(stdin);
   printf("\nEnter Mother Name : ");
    gets(con.mname);
   printf("\nEnter Sex : ");
    gets(con.sex);
   printf("\nEnter E-mail : ");
   gets(con.email);
   printf("\nEnter Address : ");
    gets(con.address);
    fflush(stdin);
    fwrite(&con, sizeof(con), 1, fp);
   fflush(stdin);
   printf("Press Y to add another contact.\n\nElse press any key to continue: ")
    a=getch();
   system("cls");
fflush(stdin);
 printf("Press any key to continue.");
 getch();
```

#### **Add New Contact**

```
{ system("color 4f");
   system("cls");
    int choice;
   printf("\n\n\n\n\n\n");
   printf("\n\n\t\t\t\t\t\t\t\t------
   printf("\n\t\t\t\t\t\t *** Welcome to the Phone Book Application ***");
    printf("\n\t\t\t\t\t\t\t\t\----
    printf("\n\n\t\t\t\t\t\t\t\t\t|| MENU ||");
   printf("\n\t\t\t\t\t\t\t\t[1] Add New Contact");
   printf("\n\n\t\t\t\t\t\t\t\t[2] List of contacts");
    printf("\n\n\t\t\t\t\t\t\t[3] Modify contacts");
   printf("\n\n\t\t\t\t\t\t\t\[6] EXIT");
    printf("\n\t\t\t\t\t\t\t=========
   printf("\n\n\t\t\t\t\t\t\t\tEnter your Selection: ");
   scanf("%d",&choice);
    switch(choice)
       case 1: newcontact(); break;
       case 2: list(); break;
       case 3: modify(); break;
       case 4: search(); break;
       case 5: deleter(); break;
       default: printf("\n\nPlease Enter correct selection: "); getch(); menu();
int main()
    menu();
```

#### **Main Window**

**List of Contacts** 

```
char cname[25];
FILE *fp;
system("cls");
printf("\n\t\t\t*\t\<-----: Modify RECORDS :--
printf("\n\nEnter the contact name you want to modify: ");
fflush(stdin);
gets(cname);
fp=fopen("record.txt","rb+");
 if(fp == NULL)
    printf("\n\nError in opening the file.");
 while(fread(&con, sizeof(con), 1, fp)==1)
    if(strcmp(cname,con.name)==0)
      printf("\nEnter Name : ");
    gets(con.name);
    printf("\nEnter Mobile Number : ");
    gets(con.mobileNo);
    printf("\nEnter Father name : ");
    gets(con.fname);
    fflush(stdin);
    printf("\nEnter Mother Name : ");
    gets(con.mname);
    printf("\nEnter Sex : ");
    gets(con.sex);
    printf("\nEnter E-mail : ");
    gets(con.email);
    fflush(stdin);
    printf("\nEnter Address : ");
    gets(con.address);
    fseek(fp, -sizeof(con),SEEK_CUR);
fwrite(&con,sizeof(con),1,fp);
    printf("\n\nContact modified successfully.\n");
    break:
printf("Enter any key to continue : ");
```

**Modify Contact** 

```
void search()
   system("cls");
   FILE *fp;
  char cname[25];
   struct contacts con;
   printf("\n\t\t\t*\t\<-----: Search Con</pre>
   printf("Enter the contact name: ");
  fflush(stdin);
   gets(cname);
   fp=fopen("record.txt","rb+");
   if(fp==NULL)
      printf("\nError in Opening File.");
      exit(1);
   while(fread(&con,sizeof(con),1,fp)==1)
      if(strcmp(cname,con.name)==0)
          printf("\nContact Name : %s",con.name);
      printf("\nMobile Number : %s",con.mobileNo);
      printf("\nFather name : %s",con.fname);
      printf("\nMother Name : %s",con.mname);
      printf("\nSex : %s",con.sex);
      printf("\nE-mail : %s",con.email);
      printf("\nAddress : %s",con.address);
   fclose(fp);
   printf("\n\nPress any key to continue. ");
   getch();
   menu();
```

#### **Search Contact**

```
void deleter()
   system("cls");
   FILE *fp,*f;
   char cname[25];
   struct contacts con;
   printf("\n\t\t\t****************************
   printf("\n\t\t\t*\t\<-----: Delet</pre>
   printf("Enter contact name to be deleted: ");
   fflush(stdin);
   gets(cname);
   fp=fopen("record.txt","rb+");
   if(fp==NULL)
      printf("\nError in Opening File.");
       exit(1);
   f=fopen("rec.txt","wb+");
   if(f==NULL)
      printf("\nError in Opening File.");
       exit(1);
   while(fread(&con, sizeof(con), 1, fp) == 1)
       if(strcmp(cname,con.name)!=0)
          fwrite(&con,sizeof(con),1,f);
   fclose(fp); fclose(f);
   printf("\n\nContact deleted successfully.\n\nPress any key
   remove("record.txt");
   rename("rec.txt","record.txt");
   getch();
   menu();
```

**Delete** 

#### How to Add a New Contact in Phonebook?

```
<----->
             Enter details of Contact.
             Enter Name : Abhishek
             Enter Mobile Number: 6352523227
             Enter Father name : Vinitbhai
             Enter Mother Name : Arohiben
             Enter Sex : Male
             Enter E-mail : abhi12@gmail.com
             Enter Address: B-12/Manohar Society, Ahmedabad
             Contact Saved Successfully.
             Press Y to add another contact.
             Else press any key to continue:
```

- ➤ Enter 1 in the main window of phonebook application.
- ➤ You can see the window named as "Add New Contact".
- Enter your details such as name, mobile number, father name, mother name, gender, E-mail and address.
- After giving such information the completion message appears as "Contact Saved Successfully".
- Now, you can add another contact by pressing 'y' or you can continue to the main window by pressing any key.
- E.g., Here contact of a person named Abhishek is added to the phonebook.

## How to See The List of Contacts in Phonebook?

S.No	Name	MobileNo	FatherName	MotherName	Sex	E-mail	Address
	Abhishek	6352523227	Vinitbhai	Arohiben	Male	abhi12@gmail.com	B-12/Manohar Society, Ahmed
	Priya	8625252372	Dineshbhai	Palakben	Female	piyu43@gmail.com	Shlok Apartment, Ahmedabad
	Janvi	6914351822	Harshadbhai	Vimlaben	Female	janvi101@gmail.com	Jogeshwary Society-3, Bharu
4	Mehul	9099770605	Girishbhai	Snehaben	Male	mehul449@gmail.com	C-37/Ravikiran Society, Raj
	Rajat	9332275453	Kartikbhai	Swetaben	Male	rajat07@gmail.com	Block-A1/Ajay Tenament, Vad
any key to	continue						
ny key to	continue.						

- Enter 2 in the main window of phonebook application.
- You can see the window named as "Phonebook Records".
- ➤ In this window, you can see your existing list of contacts.
- Then, you can continue to the main window by pressing any key.

## How to Modify existing Contact in Phonebook?

```
-----: Modify RECORDS :------
Enter the contact name you want to modify: Abhishek
        Enter Name : Abhishek
       Enter Mobile Number: 6352523227
       Enter Father name : Vinitbhai
       Enter Mother Name : Arohiben
       Enter Sex : Male
       Enter E-mail : abhi12@gmail.com
       Enter Address : B-21/Manohar Society, Ahmedabad
       Contact modified successfully.
        Enter any key to continue :
```

- Enter 3 in the main window of phonebook application.
- ➤ You can see the window named as "Modify Records".
- The message will be appear as "Enter the contact name you want to modify".
- After that enter the contact name that you want to modify. Then you can edit the details such as name, mobile number, father name, mother name, gender, E-mail and address.
- After giving such information the completion message appears as "Contact modified Successfully".
- E.g., Here address of Abhishek is changed to "B-21/Manohar Society, Ahmedabad" which was "B-12/Manohar Society, Ahmedabad" before.



<----->
<-----> Name MobileNo FatherName MotherName E-mail Vinitbhai Male abhi12@gmail.com B-12/Manohar Society, Ahmedabad Arohiben Dineshbhai Palakben piyu43@gmail.com Shlok Apartment, Ahmedabad Female 6914351822 Harshadbhai Vimlaben Female janvi101@gmail.com Jogeshwary Society-3, Bharuch Mehul 9099770605 Girishbhai Snehaben Male mehul449@gmail.com C-37/Ravikiran Society, Rajkot Rajat Kartikbhai Swetaben Male rajat07@gmail.com Block-A1/Ajay Tenament, Vadodara

Press any key to continue.



11	S.No	Name	MobileNo	FatherName	MotherName	Sex	E-mail	Address
		Abhishek	6352523227	Vinitbhai	Arohiben	Male	abhi12@gmail.com	B-21/Manohar Society, Ahmedabad
		Priya	8625252372	Dineshbhai	Palakben	Female	piyu43@gmail.com	Shlok Apartment, Ahmedabad
		Janvi	6914351822	Harshadbhai	Vimlaben	Female	janvi101@gmail.com	Jogeshwary Society-3, Bharuch
		Mehul	9099770605	Girishbhai	Snehaben	Male	mehul449@gmail.com	C-37/Ravikiran Society, Rajkot
		Rajat	9332275453	Kartikbhai	Swetaben	Male	rajat07@gmail.com	Block-A1/Ajay Tenament, Vadodara

Press any key to continue.

## How to Search existing Contact in Phonebook?

```
Enter the contact name: Priva
           Contact Name : Priva
           Mobile Number: 8625252372
           Father name : Dineshbhai
           Mother Name : Palakben
           Sex : Female
           E-mail: piyu43@gmail.com
           Address: Shlok Apartment, Ahmedabad
           Press any key to continue. _
```

- Enter 4 in the main window of phonebook application.
- ➤ You can see the window named as "Search Contact".
- The message will be appear as "Enter the contact name".
- Enter the name of person that you want to search.
  Then, You will get information such as name, mobile number, father name, mother name, gender, E-mail and address of that person.
- Now, you can continue to the main window by pressing any key.
- E.g., Here person named Priya is searched.

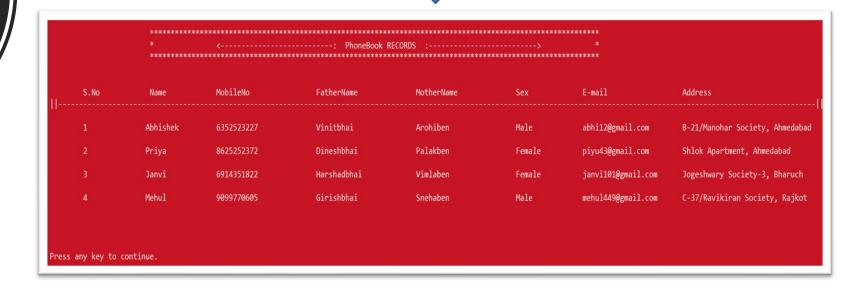
#### How to Delete existing Contact in Phonebook?

```
<-----: Delete Contact :------------
            Enter contact name to be deleted: Rajat
            Contact deleted successfully.
            Press any key to continue.
```

- Enter 5 in the main window of phonebook application.
- ➤ You can see the window named as "Delete Contact".
- The message will be appear as "Enter the contact name to be deleted".
- Enter the contact name that you want to delete.
- After giving contact name the completion message appears as "Contact deleted Successfully".
- ➤ You can continue to the main window by pressing any key.
- E.g., Here contact of a person named Rajat is deleted from the phonebook.

New List
After
Contact
Deletion

S.No	Name	MobileNo	FatherName	MotherName	Sex	E-mail	Address
	Abhishek	6352523227	Vinitbhai	Arohiben	Male	abhi12@gmail.com	B-21/Manohar Society, Ahmedat
	Priya	8625252372	Dineshbhai	Palakben	Female	piyu43@gmail.com	Shlok Apartment, Ahmedabad
	Janvi	6914351822	Harshadbhai	Vimlaben	Female	janvi101@gmail.com	Jogeshwary Society-3, Bharuc
	Mehul	9099770605	Girishbhai	Snehaben	Male	mehul449@gmail.com	C-37/Ravikiran Society, Rajk
	Rajat	9332275453	Kartikbhai	Swetaben	Male	rajat07@gmail.com	Block-A1/Ajay Tenament, Vado



## How to Exit From Phonebook Application?

```
*** Welcome to the Phone Book Application ***
                | MENU | |
        [1] Add New Contact
        [2] List of Contacts
       [3] Modify Contact
       [4] Search Contact
       [5] Delete Contact
       Enter your Selection: 10
Please Enter correct selection: _
```

- By entering 6 in the main window, you can exit from phonebook application.
- ➤ In case of wrong selection, the message appear as "Please Enter Correct Selection".
- Then, you will be able to enter another selection for further process.

#### Thank You!

