VISVESVARAYA TECHNOLOGICAL UNIVERSITY

JNANASANGAMA, BELAGAVI − 590018

Mini Project
Report Phone
Book

Submitted in partial
fulfilment for the award of
degree of

Bachelor of Engineering

In

Information Science and Engineering

Submitted by

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CERTIFICATE

Certified that the Mini project entitled "**Phone Book**" carried out by

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are bonafide students of 2nd Semester B.E, **RV Institute of Technology and Management** in partial fulfilment for the Bachelor of Engineering in INFORMATION SCIENCE AND ENGINEERING, of the **Visvesvaraya Technological University,** Belagavi, during the academic year 2021 – 2022. The Mini project report has been approved as it satisfies the academic requirements in respect of C Programming for Problem Solving.

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ABSTRACT

The system of Phonebook has been developed successfully with the immense contribution of many people. We would start by thanking our Honorable Principal Dr Jayapal R whose continued cooperation and support to the Department of Information Science Engineering was a pivotal force in making this project a success.

We would like to take the opportunity to thank and express our deep sense of gratitude to our mentor Dr.Ajina for giving us the opportunity to work on data structures and file handling in C. We would like to appreciate her guidance, encouragement and cooperation throughout the project.

We would also like to thank our Professor Dr.Ajina who has imparted the knowledge of Data Structures & Applications and made us thorough with the course, her valuable contribution and guidance have been certainly indispensable for our project work.

We hope that we can build upon the experience and knowledge that we have gained and make a valuable contribution in coming future.

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Chapter 1

INTRODUCTION

1.1 : Introduction to the project

PhoneBook:

- This mini project in C Phonebook allows you to perform simple Phonebook operations like in your mobile. You can add, list, modify, search and delete Phonebook-related records. File handling and data structure concepts has been extensively used for almost all functions in this mini project.
- Phonebook is a very simple mini project in C that can help you understand the basic concepts of functions, file handling and data structure. This application will teach you how to add, list, modify or edit, search and delete data to/from the file.
- Adding new records, listing them, modifying them and updating, search for contacts saved, and deleting the phonebook records are the basic functions which make up the main menu of this Phonebook application (as shown in the main menu screenshot below).
- Phone book application is primarily meant for keeping the records of the persons. Phone book application will provide the basic set of features of adding a new contact, searching, updating, deleting a contact.

1.2 : Relevance of the application

This program is made on accordance to make searching the phone book in an easier manner

This saves us time

Keeps us more organized

will provide the basic set of features of adding a new contact, searching, updating, deleting a contact

it allows a particular contact to be identified by name and address.

This mini project in C Phonebook allows to perform simple Phonebook operations like in the mobile. One can add, list, modify, search and delete Phonebook-related records. File handling and data structure concepts has been extensively used for almost all functions in this mini project. Phonebook in C is a console application without graphics. The source code is complete and totally error-free. It is compiled in Code Blocks with GCC compiler. Functions, file handling and data structure are used. This application contains how to add, list, modify or edit, search and delete data to/from the file. Adding new records, listing them, modifying them and updating, search for contacts saved, and deleting the phonebook records are the basic functions which make up the main menu of this Phonebook application. Personal information such as name, gender, father's name, phone number, citizenship number, email and address are asked while adding a record into the Phonebook. These records can then be modified, listed, searched for and removed.

CHAPTER 2

Algorithm

1. Start
2. Create structure for contact
   \\we create a structure that defines the contact based on Name, address, father name, mother name, mobile number, sex, email id, Aadhar number using different data types such as char/long/int.
3. Create the required functions: -
   We create the menu
   Start/back/add record/list record/modify record/delete record
   these functions can have a function of void or int as necessary.
4. We create record function
5. We create add record.
   We ask the user to ask the user to add their personal address and hence save the record.
6. List record
   here we organize different contact in a structural manner in a memory block called file which is dynamically allocated with the help of pointers.
7. Search record
   here we traverse through the information provided by using pointers
8. Modify record
   Helps to edit the details of the contact if needed
9. Delete Entry
   it deletes the particular contact's name and its details

CHAPTER 3

3.1 : Implementation details & Code

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```c
#include<stdio.h>
#include<conio.h>
#include<string.h>
#include<stdlib.h>

struct person
{
    char name[35];
    char address[50];
    char father_name[35];
    char mother_name[30];
    long int mble_no;
    char sex[8];
    char mail[100];
    char citision_no[20];

    };
void menu();
void got();
void start();
void back();
void addrecord();
void listrecord();
void modifyrecord();
void deleterecord();
void searchrecord();
int main()
{
    start();
    return 0;
}
void back()
{
    start();
}
void start()
{
    menu();
}
void menu()
```

```c
{
printf("\n\t\t*****WELCOME TO PHONEBOOK****");
printf("\n\n\t\t\tMENU\t\t\n\n");
printf("\t1.Add New   \t2.List   \t3.Exit  \n\t4.Modify \t5.Search\t6.Delete\n");

switch( getch() )
{
    case '1': addrecord();
    break;
    case '2': listrecord();
    break;
    case '3': exit(0);
    break;
    case '4': modifyrecord();
    break;
    case '5': searchrecord();
    break;
    case '6': deleterecord();
    break;
    default:
            printf("\nEnter 1 to 6 only");
            printf("\nEnter any key\n");
            getch();

menu();
}
}
    void addrecord()
{
    FILE *f;
    struct person p;
    f=fopen("project","ab+");
    printf("\nEnter name: ");
    got(p.name);
    printf("\nEnter the address: ");
    got(p.address);
    printf("\nEnter father name: ");
    got(p.father_name);
    printf("\nEnter mother name: ");
    got(p.mother_name);
    printf("\nEnter phone no. : ");
    scanf("%ld",&p.mble_no);
    printf("Enter sex:");
    got(p.sex);
    printf("\nEnter e-mail: ");
     got(p.mail);
    printf("\nEnter Aadhar no: ");
    got(p.citision_no);
    fwrite(&p,sizeof(p),1,f);

  fflush(stdin);
    printf("\nrecord saved");

fclose(f);

   printf("\n\nEnter any key");
        getch();
```

```c
    menu();
}
void listrecord()

{
    struct person p;
    FILE *f;
    f=fopen("project","rb");
    if(f==NULL)
        {
            printf("\nfile opening error in listing :");
            exit(1);
        }
    while(fread(&p,sizeof(p),1,f)==1)
        {
            printf("\n\n\n YOUR RECORD IS\n\n ");
            printf("\nName=%s\nAdress=%s\nFather name=%s\nMother name=%s\nMobile no=%ld\nSex=%s\nE-mail=%s\nAadhar
no=%s",p.name,p.address,p.father_name,p.mother_name,p.mble_no,p.sex,p.mail,p.citision_no);
            getch();
        }
    fclose(f);
    printf("\n Enter any key");
    getch();
    menu();
}
void searchrecord()
{
    struct person p;
    FILE *f;
    char name[100];
    f=fopen("project","rb");
    if(f==NULL)
    {
        printf("\n error in opening\a\a\a\a");
        exit(1);
    }
    printf("\nEnter name of person to search\n");
    got(name);
    while(fread(&p,sizeof(p),1,f)==1)
    {
        if(strcmp(p.name,name)==0)
        {
            printf("\n\tDetail Information About %s",name);
            printf("\nName:%s\naddress:%s\nFather name:%s\nMother name:%s\nMobile no:%ld\nsex:%s\nE-mail:%s\nAadhar
no:%s",p.name,p.address,p.father_name,p.mother_name,p.mble_no,p.sex,p.mail,p.citision_no);
        }
        else
            printf("file not found");

    }
    fclose(f);
    printf("\n Enter any key");
    getch();
    menu();
}
```

```c
void deleterecord()
{
    struct person p;

    FILE *f,*ft;
        int flag;
        char name[100];
        f=fopen("project","rb");
        if(f==NULL)
                {

                        printf("CONTACT'S DATA NOT ADDED YET.");


                }
        else
        {
                ft=fopen("temp","wb+");
                if(ft==NULL)

        printf("file opening error");
                else

    {
        printf("Enter CONTACT'S NAME:");
        got(name);
        fflush(stdin);
        while(fread(&p,sizeof(p),1,f)==1)
        {
                if(strcmp(p.name,name)!=0)
                    fwrite(&p,sizeof(p),1,ft);
                if(strcmp(p.name,name)==0)
                    flag=1;
        }
        fclose(f);
        fclose(ft);
        if(flag!=1)
        {
            printf("NO CONACT'S RECORD TO DELETE.");
            remove("temp.txt");
        }
        else
        {
            remove("project");
            rename("temp.txt","project");
            printf("\nRECORD DELETED SUCCESSFULLY.");
        }
    }
    }
    printf("\nEnter any key\n ");
    getch();
    menu();
}

void modifyrecord()
{
    int c;
    FILE *f;
```

```c
int flag=0;
struct person p,s;
    char  name[50];

    f=fopen("project","rb+");
    if(f==NULL)
            {
                    printf("CONTACT'S DATA NOT ADDED YET.");
                    exit(1);
            }
    else
    {
            printf("\nEnter CONTACT'S NAME TO MODIFY: \n");
    got(name);
    while(fread(&p,sizeof(p),1,f)==1)
        {
            if(strcmp(name,p.name)==0)
            {


                printf("\nEnter name: ");
                got(s.name);
                printf("\nEnter the address: ");
                got(s.address);
                printf("\nEnter father name: ");
                got(s.father_name);
                printf("\nEnter mother name: ");
                got(s.mother_name);
                printf("\nEnter phone no: ");
                scanf("%ld",&s.mble_no);
                printf("\nEnter sex: ");
                got(s.sex);
                printf("\nEnter e-mail: ");
                got(s.mail);
                printf("\nEnter Aadhar no \n");
                got(s.citision_no);
                fseek(f,-sizeof(p),SEEK_CUR);
                fwrite(&s,sizeof(p),1,f);
                flag=1;
                break;
            }
            fflush(stdin);
        }
        if(flag==1)
        {
            printf("\n Your data id modified");
        }
        else
        {
            printf(" \n data is not found");
        }
        fclose(f);
        }
        printf("\n Enter any key");
        getch();
        menu();
```
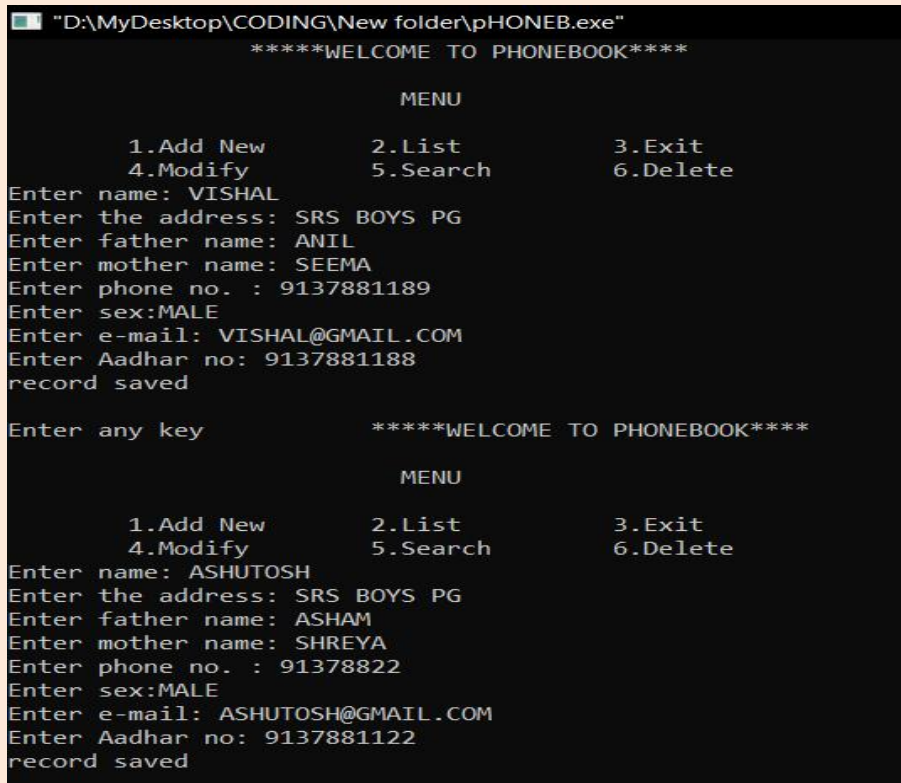
```c
}
void got(char *name)

{

    int i=0,j;

     char c,ch;
     do
     {
        c=getch();
            if(c!=8&&c!=13)
            {
                *(name+i)=c;
                  putch(c);
                  i++;
            }
            if(c==8)
            {
                if(i>0)
                {
                    i--;
                }
                for(j=0;j<i;j++)
                {
                    ch=*(name+j);
                    putch(ch);
                }

            }
     }while(c!=13);
     *(name+i)='\0';
}
```

3.2: Experimental Results/Snapshots

1. Taking data entry 1

   (press 1)

```
■ "D:\MyDesktop\CODING\New folder\pHONEB.exe"
               *****WELCOME  TO  PHONEBOOK****

                    MENU

      1.Add New        2.List          3.Exit
      4.Modify         5.Search        6.Delete
Enter name: VISHAL
Enter the address: SRS BOYS PG
Enter father name: ANIL
Enter mother name: SEEMA
Enter phone no. : 9137881189
Enter sex:MALE
Enter e-mail: VISHAL@GMAIL.COM
Enter Aadhar no: 9137881188
record saved

Enter any key          *****WELCOME  TO  PHONEBOOK****

                    MENU

      1.Add New        2.List          3.Exit
      4.Modify         5.Search        6.Delete
Enter name: ASHUTOSH
Enter the address: SRS BOYS PG
Enter father name: ASHAM
Enter mother name: SHREYA
Enter phone no. : 91378822
Enter sex:MALE
Enter e-mail: ASHUTOSH@GMAIL.COM
Enter Aadhar no: 9137881122
record saved
```

2. Checking the data List   (press 2)

```
Enter any key              *****WELCOME TO PHONEBOOK****

                              MENU

          1.Add New          2.List          3.Exit
          4.Modify           5.Search        6.Delete


 YOUR RECORD IS


Name=Vishal
Adress=SRS Boys PG
Father name=Anil
Mother name=Seema
Mobile no=547946597
Sex=Male
E-mail=vishalab_is20.rvitm@rvei.edu.in
Aadhar no=413367868488
```

```
 YOUR RECORD IS


Name=ASHUTOSH
Adress=SRS BOYS PG
Father name=ASHAM
Mother name=SHREYA
Mobile no=91378822
Sex=MALE
E-mail=ASHUTOSH@GMAIL.COM
Aadhar no=9137881122
 Enter any key              *****WELCOME TO PHONEBOOK****

                              MENU

          1.Add New          2.List          3.Exit
          4.Modify           5.Search        6.Delete
Enter 1 to 6 only
```

3. Taking third entry   (press 1)

```
Enter any key           *****WELCOME TO PHONEBOOK****

                        MENU

        1.Add New       2.List          3.Exit
        4.Modify        5.Search        6.Delete
Enter name: ABHU
Enter the address: NEERAJ
Enter father name: DHRITI
Enter mother name: DHRI
Enter phone no. : 91378866
Enter sex:MALE
Enter e-mail: ABBU@GMAIL.COM
Enter Aadhar no: 91378866
record saved
```

4. We check the list again   (press 2)

```
Enter any key           *****WELCOME TO PHONEBOOK****

                        MENU

        1.Add New       2.List          3.Exit
        4.Modify        5.Search        6.Delete


YOUR RECORD IS
```

```
Name=VISHAL
Adress=SRS BOYS PG
Father name=ANIL
Mother name=SEEMA
Mobile no=547946597
Sex=MALE
E-mail=VISHAL@GMAIL.COM
Aadhar no=9137881188


 YOUR RECORD IS


Name=ASHUTOSH
Adress=SRS BOYS PG
Father name=ASHAM
Mother name=SHREYA
Mobile no=91378822
Sex=MALE
E-mail=ASHUTOSH@GMAIL.COM
Aadhar no=9137881122


 YOUR RECORD IS


Name=ABHU
Adress=NEERAJ
Father name=DHRITI
Mother name=DHRI
Mobile no=91378866
Sex=MALE
E-mail=ABBU@GMAIL.COM
Aadhar no=91378866
 Enter any key           *****WELCOME TO PHONEBOOK****

                          MENU

         1.Add New        2.List          3.Exit
         4.Modify         5.Search        6.Delete
```

5. We use MODIFY function to modify the third entry   (press 4)

```
 Enter any key          *****WELCOME TO PHONEBOOK****

                         MENU

        1.Add New       2.List          3.Exit
        4.Modify        5.Search        6.Delete
Enter CONTACT'S NAME TO MODIFY:
ABHU
Enter name: ABHHU
Enter the address: SRS BOYS PG
Enter father name: NEERAJ
Enter mother name: SHREENA
Enter phone no: 9137881166

Enter sex: MALE
Enter e-mail: ABBU@GMAIL.COM
Enter Aadhar no
9137881166
 Your data id modified
```

6. We use search function to search for ASHUTOSH data   (press 5)

```
 Enter any key          *****WELCOME TO PHONEBOOK****

                         MENU

        1.Add New       2.List          3.Exit
        4.Modify        5.Search        6.Delete

Enter name of person to search
ASHUTOSH
        Detail Information About ASHUTOSH
Name:ASHUTOSH
address:SRS BOYS PG
Father name:ASHAM
Mother name:SHREYA
Mobile no:91378822
sex:MALE
E-mail:ASHUTOSH@GMAIL.COM
Aadhar no:91378822
 Enter any key
```

7. Using delete function   (press 6)

```
Enter any key
                *****WELCOME TO PHONEBOOK****

                        MENU

        1.Add New       2.List          3.Exit
        4.Modify        5.Search        6.Delete
Enter CONTACT'S NAME:ABHHU
RECORD DELETED SUCCESSFULLY.
```

8. Checking the list again   (press 2)

```
Enter any key
                *****WELCOME TO PHONEBOOK****

                        MENU

        1.Add New       2.List          3.Exit
        4.Modify        5.Search        6.Delete



 YOUR RECORD IS


Name=VISHAL
Adress=SRS BOYS PG
Father name=ANIL
Mother name=SEEMA
Mobile no=547946597
Sex=MALE
E-mail=VISHAL@GMAIL.COM
Aadhar no=9137881188



 YOUR RECORD IS


Name=ASHUTOSH
Adress=SRS BOYS PG
Father name=ASHAM
Mother name=SHREYA
Mobile no=547946530
Sex=MALE
E-mail=ASHUTOSH@GMAIL.COM
Aadhar no=9137881122
```

9. EXIT

Conclusion

 Phone Book is a project that is provide by technical assignment help to us in that we get a simple SQL based solution to store our contacts. We can use it to replace our hard phonebook or even use it as an office wide phone directory. This will help user to easily search and manage contacts using this system. Phonebook is the one, which contain details of an individual along with their landline numbers. Apart from the telephone number of individuals, it also contains address and number of important relatives of individual. It not only contains local codes but also ISD codes.

Future extension

Android Applications

Online Aadhar card update

Juniors projects >_>

References

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