PHONEBOOK



PROBLEM SOLVING WITH PROGRAMING

School of computer science

By

2103A51313 D.Hrithvik reddy

2103A51551 B.Adithya

2103A51219 A .Rishikesh

2103A51224 G.Ruthvik reddy

Under the Guidance of

Dr.MOHAMMED ALI SHAIK

Assistant professor,school of CS & Al

Submitted to





PHONEBOOK

Contents pg.no

1.Abstract 3-4

2.project requrements 3

3.code 5-20

4.output 21

Software:

1. **Dev-C++** is a [free](https://en.wikipedia.org/wiki/Free_software) full-featured [integrated development environment](https://en.wikipedia.org/wiki/Integrated_development_environment) (IDE) distributed under the [GNU General Public License](https://en.wikipedia.org/wiki/GNU_General_Public_License) for programming in [C](https://en.wikipedia.org/wiki/C_(programming_language)) and [C++](https://en.wikipedia.org/wiki/C%2B%2B). It was originally developed by Colin Laplace and first released in 1998. It is written in [Delphi](https://en.wikipedia.org/wiki/Delphi_(programming_language)).

It is bundled with, and uses, the [MinGW](https://en.wikipedia.org/wiki/MinGW) or [TDM-GCC](https://en.wikipedia.org/wiki/TDM-GCC) 64bit port of the [GCC](https://en.wikipedia.org/wiki/GNU_Compiler_Collection) as its [compiler](https://en.wikipedia.org/wiki/Compiler). Dev-C++ can also be used in combination with [Cygwin](https://en.wikipedia.org/wiki/Cygwin) or any other [GCC](https://en.wikipedia.org/wiki/GNU_Compiler_Collection)-based compiler



**2.Visual Studio Code**, also commonly referred to as **VS Code**,[[9]](https://en.wikipedia.org/wiki/Visual_Studio_Code#cite_note-9) is a [source-code editor](https://en.wikipedia.org/wiki/Source-code_editor) made by [Microsoft](https://en.wikipedia.org/wiki/Microsoft) for [Windows](https://en.wikipedia.org/wiki/Windows), [Linux](https://en.wikipedia.org/wiki/Linux) and [macOS](https://en.wikipedia.org/wiki/MacOS).[[10]](https://en.wikipedia.org/wiki/Visual_Studio_Code#cite_note-TechCrunch-10) Features include support for [debugging](https://en.wikipedia.org/wiki/Debugging), [syntax highlighting](https://en.wikipedia.org/wiki/Syntax_highlighting), [intelligent code completion](https://en.wikipedia.org/wiki/Intelligent_code_completion), [snippets](https://en.wikipedia.org/wiki/Snippet_(programming)), [code refactoring](https://en.wikipedia.org/wiki/Code_refactoring), and embedded [Git](https://en.wikipedia.org/wiki/Git). Users can change the [theme](https://en.wikipedia.org/wiki/Theme_(computing)), [keyboard shortcuts](https://en.wikipedia.org/wiki/Keyboard_shortcut), preferences, and install [extensions](https://en.wikipedia.org/wiki/Plug-in_(computing)) that add additional functionality.





PROJECT DESCRIPTION

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).

Personal information such as name, sex, 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.

I have used many functions in this mini project. These functions are easy to understand as their name only signifies their respective operations.

* void menu() – This function is used to display the main menu.
* void start() – This functions calls the menu function mentioned above.
* void back() – This function is used to go back to start.
* void addrecord() – It adds a new Phonebook record.
* void listrecord() – This function is used to view list of added records in file.
* void modifyrecord() – This function is used to modify added records.
* void deleterecord() – It deletes record from file.
* void searchrecord() – It searches for added record by name.



Source code for phonebook

#include<stdio.h>

#include<conio.h>

#include<string.h>

#include<stdlib.h>

#include<windows.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()

{

system("color 5f");

start();

return 0;

}

void back()

{

start();

}

void start()

{

menu();

}

void menu()

{

system("cls");

printf("\t\t\*\*\*\*\*WELCOME TO PHONEBOOK\*\*\*\*");

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

printf("\t1.Add New \t2.List \t3.Exit \n\t4.Modify \t5.Search\t6.Delete");

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:

system("cls");

printf("\nEnter 1 to 6 only");

printf("\n Enter any key");

getch();

menu();

}

}

void addrecord()

{

system("cls");

FILE \*f;

struct person p;

f=fopen("project","ab+");

printf("\n Enter 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 citizen no:");

got(p.citision\_no);

fwrite(&p,sizeof(p),1,f);

fflush(stdin);

printf("\nrecord saved");

fclose(f);

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

getch();

system("cls");

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\nCitizen no=%s",p.name,p.address,p.father\_name,p.mother\_name,p.mble\_no,p.sex,p.mail,p.citision\_no);

getch();

system("cls");

}

fclose(f);

printf("\n Enter any key");

getch();

system("cls");

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\nCitision 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();

system("cls");

menu();

}

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 opaning 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("RECORD DELETED SUCCESSFULLY.");

}

}

}

printf("\n Enter any key");

getch();

system("cls");

menu();

}

void modifyrecord()

{

int c;

FILE \*f;

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

{

system("cls");

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("\n Enter 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 citizen 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();

system("cls");

menu();

}

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--;

}

// printf("h");

system("cls");

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

{

ch=\*(name+j);

putch(ch);

}

}

}while(c!=13);

\*(name+i)='\0';

}

Output:

