



SRM

INSTITUTE OF SCIENCE & TECHNOLOGY

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PROJECT TITLE

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REG NO : RA2111002010030

DEPARTMENT : MECHANICAL

SUBMITTED TO

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DSBS

SCHOOL OF COMPUTING

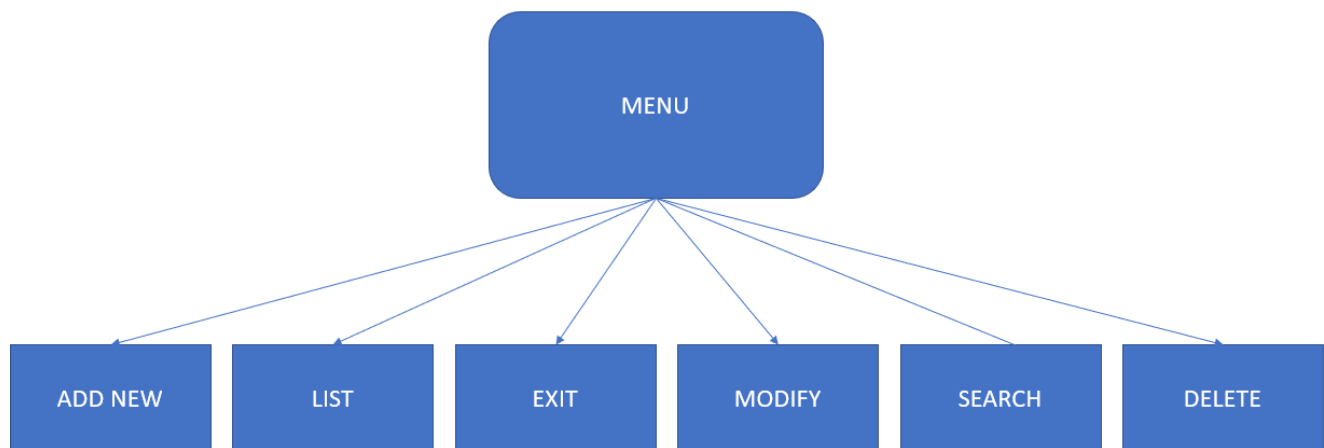
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JANUARY 2022

ABSRACT

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 .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.

FLOW CHART



PROGRAM

```
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <curses.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("clear");
    printf("\t\t*****WELCOME TO PHONEBOOK*****");

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

    switch (getc(stdin))
    {
        case '1':

            getc(stdin);addrecord();
            break;
        case '2':
```

```

        getc(stdin);listrecord();
        break;
    case '3':
        getc(stdin);exit(0);
        break;
    case '4':
        getc(stdin);modifyrecord();
        break;
    case '5':
        getc(stdin);searchrecord();
        break;
    case '6':
        getc(stdin);deleterecord();
        break;
    default:
        system("clear");
        printf("\nEnter 1 to 6 only");
        printf("\n Enter any key");

        menu();
    }
}
void addrecord()
{
    system("clear");
    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);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");

    getc(stdin);
    system("clear");

```

```

    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 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);

        getc(stdin);
        system("clear");
    }
    fclose(f);
    printf("\n Enter any key");
    getc(stdin);
    system("clear");
    menu();
}
void searchrecord()
{
    struct person p;
    FILE *f;
    char name[100];

    f = fopen("project", "rb");
    if (f == NULL)
    {
        printf("\n error in opening\n\n");
        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");

getc(stdin);
system("clear");
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");

getc(stdin);
system("clear");
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("clear");
        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);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");
getc(stdin);
system("clear");
menu();
}
void got(char *name)
{

    int i = 0, j;
    char c, ch;
    do
    {
        scanf("%c", &c);
        if (c != 8 && c != 13)
        {
            *(name + i) = c;
            printf("%c", c);
            i++;
        }
        if (c == 8)
        {
            if (i > 0)
            {
                i--;
            }
            // printf("h");
            system("clear");
            for (j = 0; j < i; j++)
            {
                ch = *(name + j);
                printf("%c", ch);
            }
        }
    } while (c != 10);
    *(name + i) = '\0';
}

```

RESULTS

*****WELCOME TO PHONEBOOK*****

MENU

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

Enter name: Rahul
Rahul

Enter the address: Tripunithura
Tripunithura

Enter father name: Anand
Anand

Enter mother name: Smitha
Smitha

Enter phone no.:7458961254
Enter sex:
M
M

Enter e-mail:Rahul@gmail.com
Rahul@gmail.com

Enter citizen no:78556
78556

record saved

Enter any key

*****WELCOME TO PHONEBOOK*****

MENU

1.Add New	2.List	3.Exit
4.Modify	5.Search	6.Delete2

YOUR RECORD IS

Name=Rahul

Adress=Tripunithura

Father name=Anand

Mother name=Smitha

Mobile no=7458961254
Sex=M

E-mail=Rahul@gmail.com

Citizen no=78556

Enter any key

*****WELCOME TO PHONEBOOK*****

MENU

1.Add New	2.List	3.Exit
4.Modify	5.Search	6.Delete4

Enter CONTACT'S NAME TO MODIFY:

Rahul

Rahul

Enter name:Rahul RCJPS

Rahul RCJPS

Enter the address:Tripunithura

Tripunithura

Enter father name:Anand

Anand

Enter mother name:Smitha

Smitha

Enter phone no:7458961254

Enter sex:

M

M

Enter e-mail:Rahul@gmail.com

Rahul@gmail.com

Enter citizen no

78556

78556

your data id modified

Enter any key

*****WELCOME TO PHONEBOOK*****

MENU

1.Add New	2.List	3.Exit
4.Modify	5.Search	6.Delete5

Enter name of person to search

Rahul RCJPS

Rahul RCJPS

Detail Information About Rahul RCJPS

Name:Rahul RCJPS

address:Tripunithura

Father name:Anand

Mother name:Smitha

Mobile no:7458961254

sex:M

E-mail:Rahul@gmail.com

Citision no:78556

Enter any key

*****WELCOME TO PHONEBOOK*****

MENU

1.Add New	2.List	3.Exit
4.Modify	5.Search	6.Delete6

Enter CONTACT'S NAME:Rahul RCJPS

Rahul RCJPS

RECORD DELETED SUCCESSFULLY.

Enter any key

*****WELCOME TO PHONEBOOK*****

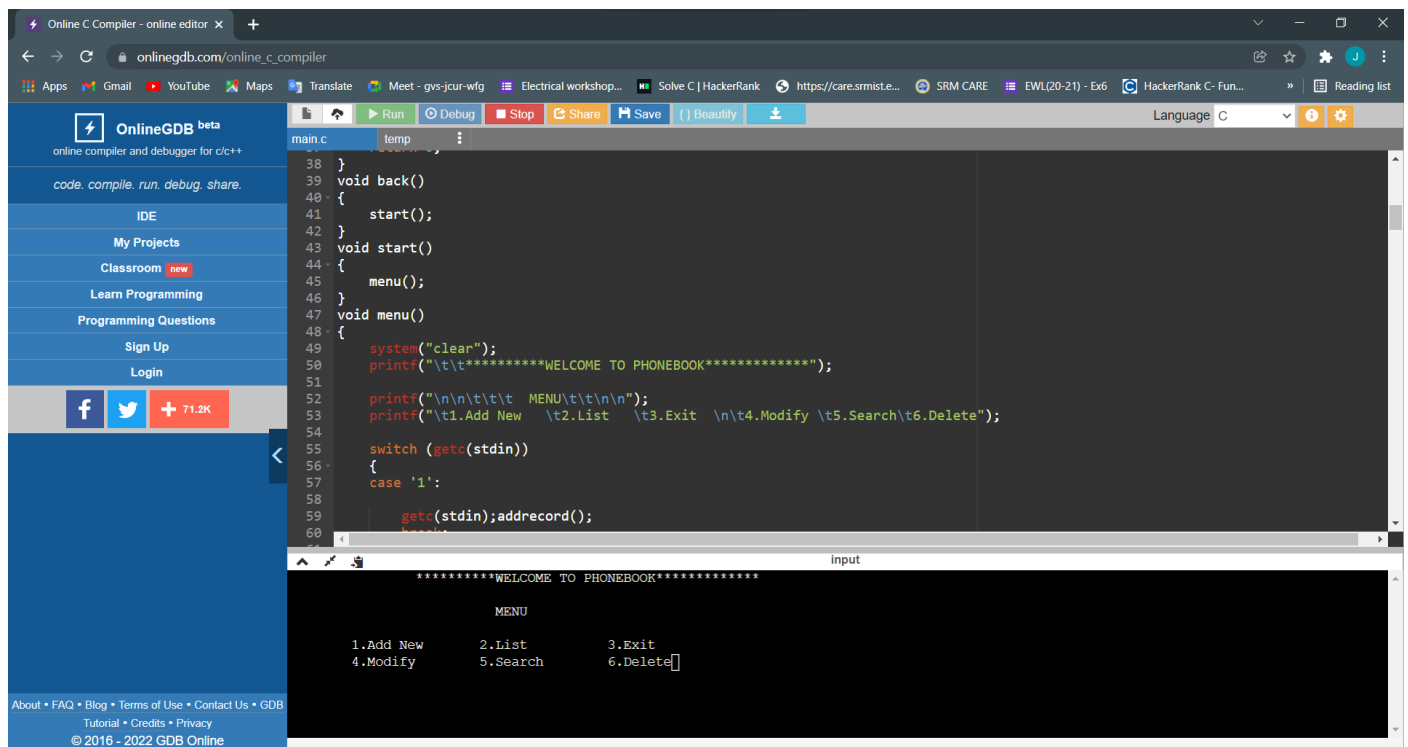
MENU

1.Add New	2.List	3.Exit
4.Modify	5.Search	6.Delete3

...Program finished with exit code 0

Press ENTER to exit console.

SCREENSHOTS



DECLARATION

I hereby declare that the project entitled “PHONEBOOK “which is being submitted as a mini Project for 1ST semester in Mechanical Engineering to SRM INSTITUTE OF SCIENCE AND TECHNOLOGY is an authentic work done under the complete guidance of Prof DR R. RAJKUMAR, SCHOOL OF COMPUTING. SRMIST, I would also like to thank the professors’ friends and family members who have supported me during this time. Last but not the least, I would like to thank GOD ALMIGHTY.

Date: 08/01/2022

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