

13016235: C Programming

First Semester, 2018

Project Proposal

1. Project developer

-Student ID: 61090030 Name: Sathienpong Polachan

2. Project title

-Contacts management

3. Project description and requirements Project description:

(Note: figures, flowcharts, diagrams may be used to describe the project)

-What it is about?

-This project is about storing your contact in the program and when you input specific contact in the program, it will store name, address, mobile number, gender, mail and citizen ID in the file. This program have 6 function in the menu. First, Add contact, you can add contact by fill in the information form. Secondly, Contact list, this method will show you all the list you have been added. Thirdly, Delete contact, this will delete contact that you not want it anymore. Next, Modify contact, modify the contact that you enter the wrong information. After that, Search contact, if you forget some information, just search for it. finally, Quit, exit from the program. This all function will make your life more convenient

because you don't have to remember all the information just open a file, easy and simple.

Project requirements:

```
#include <stdio.h>
```

– for standard input output and it is include in every c program

```
#include <stdlib.h>
```

–define some variable type and some function

```
#include <curses.h>
```

–for colours and EOF

```
#include <string.h>
```

–for variable type

```
#include <unistd.h>
```

–for sleep function

–User inputs

```
#include <stdio.h> //for standard input output and it is included
in every c program
#include <stdlib.h> //for NULL
#include <curses.h> //for colours and EOF
#include <string.h> //for variable type
#include <unistd.h>
```

```
#define RED      "\x1b[31m"
#define GREEN    "\x1b[32m"
#define YELLOW   "\x1b[33m"
#define BLUE     "\x1b[34m"
#define MAGENTA  "\x1b[35m"
#define CYAN     "\x1b[36m"
#define RESET    "\x1b[0m"
```

```
struct person
{
    char name[35];
    char address[50];
    char mble_no[20];
    char sex[8];
    char mail[100];
    char citizen_id[20];
};
```

```
struct person p;
int i,found;
char name[35];
FILE *confile, *fp;
```

```
void add_contact();
void show_list();
void delete_contact();
void modify_contact();
void search_contact();
void quit();
void passlogin();
void menu();
```

```
int main()
{
    system("clear");
    passlogin();
    menu();
}
```

```
// ***** LOGIN
```

```
*****
```

```
void passlogin()
```

```
{
    char pass[10],password[10]="pure"; // change password here
```

```

printf(GREEN"\n\t\t\t\t !!!SECURITY SYSTEM!!!\n\n"RESET);
printf(GREEN"\t\t\t\tPlese Enter password: ");
scanf("%s"RESET,pass);

if (strcmp(pass,password)==0)
{
    printf(GREEN"\n\t\t\t\t\t PASSWORD CORRECT \n\n\t\t\t\tWELCOME
TO CONTACT MANAGEMENT SYSTEM :D:D \n"RESET);

    sleep(2);
    menu();
}
else
{
    fflush(stdin); // clear buffer
    system("clear");
    printf(RED"\n\t\t\t\t\t !!!WRONG PASSWORD!!!
\a\a\a\a\n\n=====
===== "RESET);
    passlogin();
}
}

// ***** MENU
*****

void menu()
{
    char method;
    system("clear");
    printf("\t\t\t\tWELCOME TO CONTACT MANAGEMENT\n\n");
    printf("\t\t\t\t\t ||MENU||
\n\t\t=====
==\n");
    printf("\t(a).Add Contact \t(l).Contact list \t(d).Delete
Contact \n\t(m).Modify Contact \t(s).Search Contact
\t(q).quit\n\t=====
=====");
    printf("\n\tEnter your method number: ");
    scanf("%s",&method);
    switch(method)
    {
        case 'a':
            add_contact();
            break;
        case 'A':
            add_contact();
            break;
        case 'l':
            show_list();
            break;
        case 'L':

```

```

        show_list();
        break;
    case 'd':
        delete_contact();
        break;
    case 'D':
        delete_contact();
        break;
    case 'm':
        modify_contact();
        break;
    case 'M':
        modify_contact();
        break;
    case 's':
        search_contact();
        break;
    case 'S':
        search_contact();
        break;
    case 'q':
        quit();
        break;
    case 'Q':
        quit();
        break;
    default:
        printf(RED"Please enter number from 1 - 6 !!!
\\a\\a\\a\\n\\n"RESET);
        sleep(1);
        menu();
    }
}

// ***** ADD CONTACT *****
void add_contact()
{
    system("clear");
    // struct person new_person;

    confile=fopen("contact.txt","a+");
    if (confile == NULL)
    {
        printf("File dose not exist\\a\\a");
        return;
    }
    printf("=====\nPlease complete this
information form\n=====\n\\n");
    printf("Please enter name: ");

```

```

getchar();
fgets(p.name,35,stdin);
//fprintf(confile,"Name = %s",new_person.name);

printf("Please enter address: ");
fgets(p.address,50,stdin);
//fprintf(confile,"Address = %s",new_person.address);

printf("Please enter mobile number: ");
fgets(p.mble_no,20,stdin);
//fprintf(confile,"Mobile number = %d",*new_person.mble_no);

printf("Please enter gender: ");
fgets(p.sex,8,stdin);
//fprintf(confile,"Gender = %s",new_person.sex);

printf("Please enter E-mail: ");
fgets(p.mail,100,stdin);
//fprintf(confile,"E-mail = %s",new_person.mail);

printf("Please enter citizen ID: ");
fgets(p.citizen_id,20,stdin);
//fprintf(confile,"Citizen Identify Number =
%d",*new_person.citizen_id);

fseek(stdin,0,SEEK_END);
fseek(confile,0,SEEK_END);

fprintf(confile,"=====\\
nName = %s\\nAddress = %s\\nMobile No. = %s\\nGender = %s\\nMail =
%s\\nCitizen ID =
%s\\n",p.name,p.address,p.mble_no,p.sex,p.mail,p.citizen_id);

fclose(confile);
printf("contact saved.\\n\\n");
sleep(1);
getchar();
fseek(stdin,0,SEEK_END);
system("clear");
printf("Name          = %s\\n",p.name);
printf("Address       = %s\\n",p.address);
printf("Mobile No.    = %s\\n",p.mble_no);
printf("Gender        = %s\\n",p.sex);
printf("E-mail       = %s\\n",p.mail);
printf("Citizen ID = %s\\n",p.citizen_id);

printf("\\n\\nEnter any key");
getchar();
fseek(stdin,0,SEEK_END);
menu();
}

```

```
// ***** SHOW LIST
*****
```

```
void show_list()
{
    system("clear");
    confile = fopen("contact.txt","rb");
    if (confile == NULL)
    {
        system("clear");
        printf("\nfile opening error in listing\n\n");
        exit(1);
    }
    while(fread(&p,sizeof(p),1,confile)==1)
    {
        printf("\n\t\t===== \n\t\t\tLIST
OF CONTACTS\n\t\t\t===== \n");

        printf("\n%s\n%s\n%s\n%s\n%s\n%s\n",p.name,p.address,p.mble_no,p.s
ex,p.mail,p.citizen_id);
        getchar();
    }
    fclose(confile);

    system("clear");
    printf("\nPress any key to continue\n");
    getchar();
    getchar();
    fflush(stdin);
    menu();
}
```

```
// ***** QUIT
*****
```

```
void quit()
{
    char ans;
    system("clear");
    printf("\tAre you sure you want to exit? \n\t[y] or [n]: ");
    scanf("%s",&ans);
    switch(ans)
    {
        case 'y':
            exit(1);
        case 'Y':
            exit(1);
        case 'n':
            menu();
        case 'N':
```

[illegible]


```

        //fprintf(confile,"E-mail = %s",new_person.mail);

        printf("Please enter citizen ID: ");
        fgets(p.citizen_id,20,stdin);
        //fprintf(confile,"Citizen Identify Number =
%d",*new_person.citizen_id);
        fflush(stdin);
        fseek(confile,ftell(confile)-sizeof(p),0);
        fprintf(confile,"%s,%s,%s,%s,%s,
%s\n",p.name,p.address,p.mble_no,p.sex,p.mail,p.citizen_id);
        fclose(confile);
        printf(GREEN"Contact saved!\a\n\n"RESET);
        fseek(stdin,0,SEEK_END);
        sleep(1);
        menu();
        f=1;
    }
    if (f==0)
    {
        printf(RED"Contact not found !!!!\a\n\n"RESET);
    LOOP:
        printf("Want to add contact or back to menu or quit the
program ?\n\n [A] for add \n [M] for menu\n [Q] for quit\n Enter
your method : ");
        scanf("%s",&method);

        switch(method)
        {
            case 'A':
                add_contact();
                break;
            case 'a':
                add_contact();
                break;
            case 'M':
                menu();
                break;
            case 'm':
                menu();
                break;
            case 'Q':
                quit();
                break;
            case 'q':
                quit();
                break;
            default:
                printf("Please enter method above!!!\n\n\a\a\a");
                goto LOOP;
        }
    }
}

```

```
// ***** SEARCH
CONTACT *****

void search_contact()
{
    char method;
    system("clear");

    printf("\n\t\t===== \n\t\t\tSEARCH
CONTACT\n\t\t\t===== \n\n");
    printf("Please enter name: ");
    getchar();
    fgets(name,35,stdin);

    confile = fopen("contact.txt","r");

    if (strcmp(p.name,(name))==0)
    {
        system("clear");
        printf("\n\nContact found!\n\n");
        printf("\nName = %s\nAddress = %s\nMobile No. = %s\nGender
= %s\nE-mail = %s\nCitizen ID =
%s\n",p.name,p.address,p.mble_no,p.sex,p.mail,p.citizen_id);
        printf("Enter any key to continue");
        getchar();
        menu();
    }
    else
    {
        printf(RED"contact not found !!!\n\n\a\a"RESET);
    LOOP:
        printf("Want to add contact or back to menu or quit the
program ?\n\n [A] for add \n [M] for menu\n [Q] for quit\n Enter
your method : ");
        scanf("%s",&method);

        switch(method)
        {
            case 'A':
                add_contact();
                break;
            case 'a':
                add_contact();
                break;
            case 'M':
                menu();
                break;
            case 'm':
                menu();
        }
    }
}
```

```

        break;
    case 'Q':
        quit();
        break;
    case 'q':
        quit();
        break;
    default:
        printf("Please enter method above!!!\n\n\a\a\a");
        goto LOOP;
    }
}
}

```

// ***** DELETE
CONTACT *****

```

void delete_contact()
{
    char method;
    system("clear");
    fflush(stdin);
    printf("\n\t\t===== \n\t\t\tDELETE
CONTACT\n\t\t\t===== \n\n");
    printf("Enter name: ");
    getchar();
    fgets(name,35,stdin);

    confile = fopen("contact.txt","r");
    if(confile==NULL)
    {

        printf("CONTACT'S DATA NOT ADDED YET.");
        sleep(2);
        menu();
    }
    if (strcmp(p.name,(name))==0)
    {
        fp = fopen("temp.txt","w");

        while(fread(&p,sizeof(p),1,confile)!=0)
            if (strcmp(name,p.name)!=0)
            {
                fwrite(&p,sizeof(p),1,fp);
            }
        fclose(confile);
        fclose(fp);

        remove("contact.txt");
        rename("temp.txt","contact.txt");

        printf(GREEN"RECORD DELETED SUCCESSFULLY.\n\n"RESET);
    }
}

```

```

        printf("enter any key to continue");
        getchar();
        fseek(stdin,0,SEEK_END);
        menu();
    }
    if (strcmp(p.name,(name))!=0)
    {
        printf(RED"Contact not found!!!\n\n\a\a\a"RESET);
    LOOP:
        printf("Want to add contact or back to menu or quit the
program ?\n\n [A] for add \n [M] for menu\n [Q] for quit\n Enter
your method : ");
        scanf("%s",&method);
        switch(method)
        {
            case 'A':
                add_contact();
                break;
            case 'a':
                add_contact();
                break;
            case 'M':
                menu();
                break;
            case 'm':
                menu();
                break;
            case 'Q':
                quit();
                break;
            case 'q':
                quit();
                break;
            default:
                printf("Please enter method above!!!\n\n\a\a\a");
                goto LOOP;
        }
        fseek(stdin,0,SEEK_END);
    }
}

```

Flowchart

