

VACCINATION REGISTRATION SYSTEM

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OBJECTIVE:

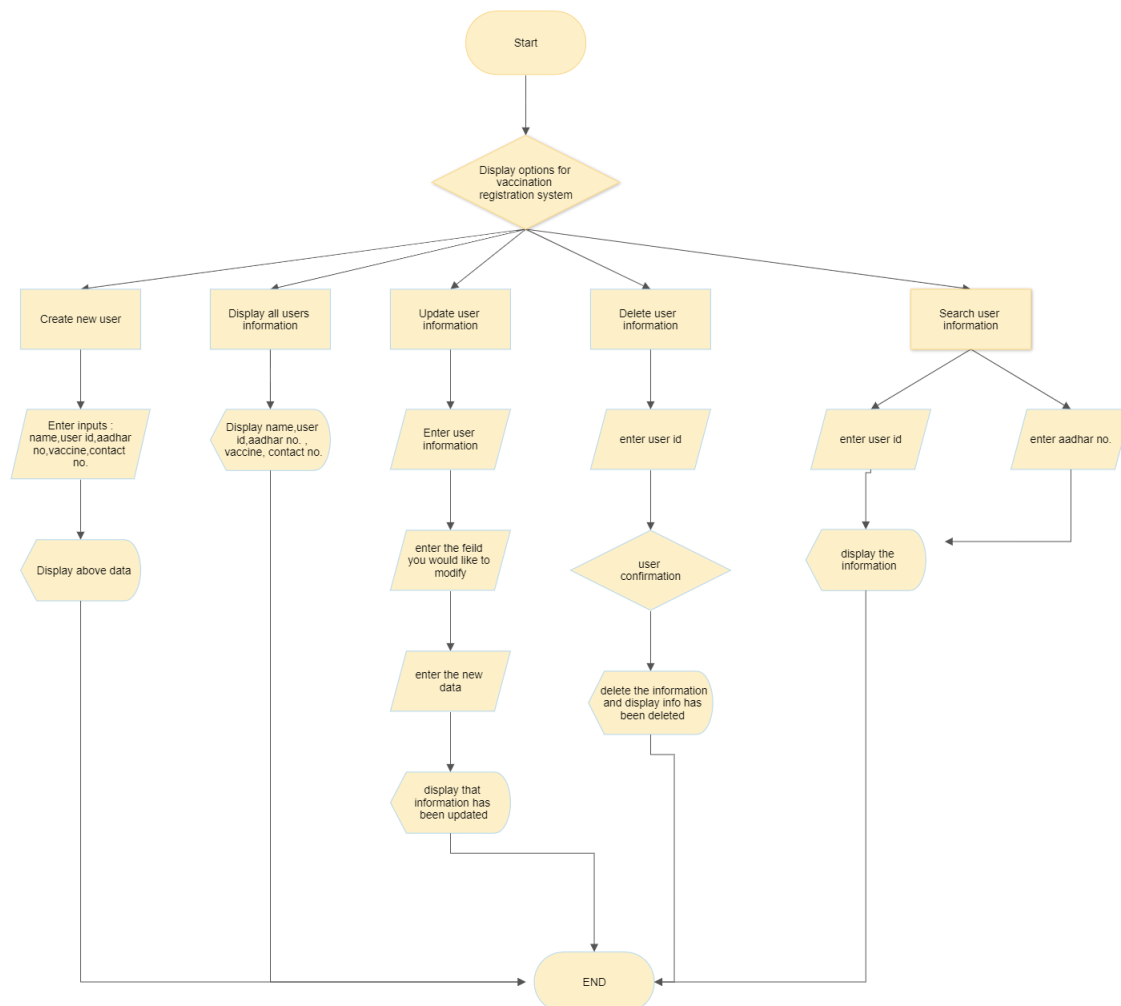
To create a file with database of vaccinated citizens with their preferred vaccine

PROBLEM DEFINITION:

India have 2nd highest population in world and to create a manual file of this much population is not at all a easy thing.so create a

C program to create a file and store the database of vaccinated population with the vaccination they used in that file.

FLOWCHART



Algorithm

Step 1 : Start

Step 2 : Display the options for vaccine registration system

Step 2A: Create new user

Step 2 B: Display all users information

Step 2 C: Update user information

Step 2 D: Delete user information

Step 2 E: Search user information

Step 3 : Under "Create new user"

Step 3A: Get the following inputs from user: Name, User ID, Aadhar number , vaccine taken , contact number

Step 3B: Display all the inputs entered by the user in Step 3A

Step 4 : Under "Display all users information"

Step 4A: Displays the following information for existing users: Name, user ID, Aadhar number, vaccinetaken, contactnumber

Step5: Under"Update user information"

Step 5 A: Enter user ID

Step 5B: Enter the field you would like to modify: Name,userID ,Aadhar number, vaccine taken, contact number

Step 5 C: Enter the new data for the above selectedfield

Step 5 D: Displays that the information has been updated

Step 6 : Under "Delete user information"

Step 6 A: Enter user ID

Step 6B: Asks confirmation for deleting all the information

Step 6C: Deletes information if the confirmation is given else does not delete information

Sep 7 :Under "Search user information"

Step 7A:Enter either of the following inputs : User ID or Aadhar number

Step 7 B: Displays the following information: Name, user ID,Aadhar number, vaccine taken

Program

```
#include <stdio.h>

#include <string.h>

#include <conio.h>

#include <stdlib.h>


typedef struct User
{
    char UserName[50];
    char UserId[15];
    char UserAadhar[20];
    char Vaccine_name[100];
    char UserContactNum[15];

} User;


void createAccount();

void displayInfo();

void updateInfo();

void deleteInfo();

void searchInfo();


int main()
{
    char option;
```

```

while (option != 'o')
{
    system("cls");

    printf("\t\t\t\t\t==== Vaccine Registration System =====\n");
    printf("\n\t\t\t\t\t1. Create User Account");
    printf("\n\t\t\t\t\t2. Display All Users Information");
    printf("\n\t\t\t\t\t3. Update User Information");
    printf("\n\t\t\t\t\t4. Delete User Information");
    printf("\n\t\t\t\t\t5. Search User Information");
    printf("\n\t\t\t\t\t0. Exit");

    printf("\n\n\n\t\t\t\t\tEnter Your Option: ");
    scanf(" %c", &option);

    switch (option)
    {
    case '1':
        createAccount();
        break;
    case '2':
        displayInfo();
        break;
    case '3':
        updateInfo();
        break;
    case '4':

```

```
        deleteInfo();

        break;

case '5':

    searchInfo();

    break;

case 'o':

    printf("\n\t\t\t\t\t==== Thank You =====");

    break;

default:

    printf("\n\t\t\t\t\tInvalid Option, Please Enter Right Option !\n");

}

}

return o;

}
```

```
void createAccount()

{

    FILE *fileOne = fopen("UserInfo.bin", "ab+");

    if (fileOne == NULL)

    {

        printf("\n\t\t\t\t\tError !\n");

    }

}
```

User Info;

```

system("cls");

printf("\t\t\t\t\t==== Create User Account =====\n");

printf("\n\t\t\t\t\tEnter User's Name : ");
getchar();
gets(Info.UserName);

printf("\t\t\t\t\tEnter User's ID : ");
gets(Info.UserId);

printf("\t\t\t\t\tEnter User's Aadhaar : ");
gets(Info.UserAadhar);

printf("\t\t\t\t\tEnter User's Vaccine : ");
gets(Info.Vaccine_name);

printf("\t\t\t\t\tEnter User's Contact Number : ");
gets(Info.UserContactNum);

fwrite(&Info, sizeof(Info), 1, fileOne);

printf("\n\n\t\t\t\t\tInformations have been stored sucessfully\n");
printf("\n\n\t\t\t\t\tEnter any keys to continue.....");
getch();

fclose(fileOne);
}

void displayInfo()

```

```
{  
  
FILE *fileOne = fopen("UserInfo.bin", "rb");  
  
if (fileOne == NULL)  
{  
    printf("\n\t\t\tError !\n");  
}  
  
User Info;  
  
system("cls");  
  
printf("\t\t\t\t==== All Users Information =====\n");  
  
printf("\n\n\t\t%-20s%-13s%-10s%-25s%-15s%", "Name", "ID", "Aadhaar", "Vaccine", "Contact");  
printf("\t\t-----");  
  
while (fread(&Info, sizeof(Info), 1, fileOne) == 1)  
{  
    printf("\n\n\t\t%-20s%-13s%-10s%-25s%-15s%", Info.UserName, Info.UserId, Info.UserAadhar,  
Info.Vaccine_name, Info.UserContactNum);  
}  
  
printf("\n\n\t\tEnter any keys to continue.....");  
  
getch();  
  
fclose(fileOne);
```



```
}
```

```
void updateInfo()
```

```
{
```

```
FILE *fileOne = fopen("UserInfo.bin", "rb");
```

```
FILE *temp = fopen("temp.bin", "wb");
```

```
User Info, tempInformation;
```

```
int choice, flag = 0;
```

```
if (fileOne == NULL || temp == NULL)
```

```
{
```

```
    printf("\n\t\t\tError !\n");
```

```
}
```

```
system("cls");
```

```
printf("\t\t\t\t\t==== Update Users Information =====\n");
```

```
printf("\n\t\t\tEnter User's ID : ");
```

```
getchar();
```

```
gets(tempInformation.UserId);
```

```
while (fread(&Info, sizeof(Info), 1, fileOne) == 1)
```

```
{
```

```

if (strcmp(Info.UserId, tempInformation.UserId) == 0)
{
    flag++;

    printf("\n\t\t\tChoose your option : \n\t\t\t1.Update User Name\n\t\t\t2.Update User
ID\n\t\t\t3.Update User Aadhaar\n\t\t\t4.Update User Contact No.");

    printf("\n\n\t\t\tEnter Your Option : ");

    scanf("%d", &choice);

    if (choice == 1)
    {
        printf("\n\t\t\tEnter User's Name to Update: ");

        getchar();

        gets(tempInformation.UserName);

        strcpy(Info.UserName, tempInformation.UserName);

        fwrite(&Info, sizeof(Info), 1, temp);

        printf("\n\n\t\t\tUpdated successfully!\n\n");
    }
    else if (choice == 2)
    {
        printf("\n\t\t\tEnter User's Aadhaar to Update: ");

        getchar();

        gets(tempInformation.UserAadhar);

        strcpy(Info.UserAadhar, tempInformation.UserAadhar);

        fwrite(&Info, sizeof(Info), 1, temp);

        printf("\n\n\t\t\tUpdated successfully!\n\n");
    }
}

```

```

else if (choice == 3)
{
    printf("\n\t\t\tEnter User's Vaccine to Update: ");
    getchar();
    gets(tempInformation.Vaccine_name);
    strcpy(Info.Vaccine_name, tempInformation.Vaccine_name);

    fwrite(&Info, sizeof(Info), 1, temp);

    printf("\n\n\t\t\tUpdated successfully!\n\n");
}
else if (choice == 4)
{
    printf("\n\t\t\tEnter User's Contact No. to Update: ");
    getchar();
    gets(tempInformation.UserContactNum);
    strcpy(Info.UserContactNum, tempInformation.UserContactNum);

    fwrite(&Info, sizeof(Info), 1, temp);

    printf("\n\n\t\t\tUpdated successfully!\n\n");
}
else
{
    printf("\n\t\t\tInvalid Option.");
    fwrite(&Info, sizeof(Info), 1, temp);
}
}

```

```

        else
        {
            fwrite(&Info, sizeof(Info), 1, temp);
        }
    }

fclose(fileOne);
fclose(temp);

remove("UserInfo.bin");
rename("temp.bin", "UserInfo.bin");

if (flag == 0)
{
    printf("\n\t\t\tUser Id is not found");
}

printf("\n\n\t\t\tEnter any keys to continue.....");
getch();
}

void deleteInfo()
{
    FILE *fileOne = fopen("UserInfo.bin", "rb");
    FILE *temp = fopen("temp.bin", "wb");

```

```
User Info, tempInformation;
```

```
int choice, flag = 0;
```

```
if (fileOne == NULL || temp == NULL)
```

 $\{$

```
printf("\n\t\t\tError !\n");
```

}

```
system("cls");
```

```
printf("\t\t\t\t\t==== Delete User Information =====\n");
```

```
printf("\n\t\t\tEnter User's ID : ");
```

```
getchar();
```

```
gets(tempInformation.UserId);
```

```
while (fread(&Info, sizeof(Info), 1, fileOne) == 1)
```

$$\{$$

```
if (strcmp(Info.UserId, tempInformation.UserId) == 0)
```

$$\{$$

```
flag++;
```

```
printf("\n\t\tAre you sure to delete ??\n\t\tt1.Yes\n\t\tt2.Back\n\t\tEnter  
Your Option : ");
```

scanf("%d", &choice);

```
if (choice == 1)
```

 $\{$

```
        printf("\n\n\t\t\tInformation has been deleted successfully!\n\n");
    }
    else if (choice == 2)
    {
        fwrite(&Info, sizeof(Info), 1, temp);
    }
    else
    {
        printf("\n\t\t\tInvalid Option");
        fwrite(&Info, sizeof(Info), 1, temp);
    }
}
else
{
    fwrite(&Info, sizeof(Info), 1, temp);
}
}

fclose(fileOne);
fclose(temp);

remove("UserInfo.bin");
rename("temp.bin", "UserInfo.bin");

if (flag == 0)
{
```

```
printf("\n\t\t\tUser Id is not found");  
  
}  
  
printf("\n\n\t\t\tEnter any keys to continue.....");  
  
getch();  
  
}  
  
void searchInfo()  
{  
  
FILE *fileOne = fopen("UserInfo.bin", "rb");  
  
  
User Info;  
  
  
int choice, flag = 0;  
  
char UserID[20], UserAadhar[20];  
  
  
if (fileOne == NULL)  
{  
  
    printf("\n\t\t\tError !\n");  
  
}  
  
  
system("cls");  
  
  
printf("\t\t\t\t===== Search User Information =====\n");  
  
  
  
printf("\n\t\t\tChoose your option :\n\t\t\t1.Search by User ID\n\t\t\t2.Search by Aadhaar");
```

```

printf("\n\n\t\tEnter Your Option : ");

scanf("%d", &choice);

if (choice == 1)
{
    system("cls");

    printf("\t\t\t\t\t===== Search User Information =====\n");

    printf("\n\n\t\tEnter User ID : ");

    getchar();

    gets(UserID);

    while (fread(&Info, sizeof(Info), 1, fileOne) == 1)
    {
        if (strcmp(Info.UserId, UserID) == 0)
        {
            flag++;

            printf("\n\t\t\tUser Name : %s\n\t\t\tUser ID : %s\n\t\t\tUser Aadhaar : %s\n\t\t\tUser Vaccine : %s\n\t\t\tUser Contact No. : %s", Info.UserName, Info.UserId, Info.UserAadhar, Info.Vaccine_name, Info.UserContactNum);
        }
    }

    if (flag == 0)
    {
        printf("\n\t\t\tUser Id is not found");
    }
}

else if (choice == 2)
{

```



```
system("cls");

printf("\t\t\t\t==== Search User Information =====\n");

printf("\n\n\t\tEnter User Aadhaar : ");

getchar();

gets(UserAadhar);

printf("\n\n\t\t%-20s%-13s%-10s%-25s%-15s%-s\n",   "Name",    "ID",    "Dept.",    "Address",
>Contact");

printf("\t\t-----");

while (fread(&Info, sizeof(Info), 1, fileOne) == 1)
{
    if (strcmp(Info.UserAadhar, UserAadhar) == 0)
    {
        flag++;

        printf("\n\n\t\t%-20s%-13s%-10s%-25s%-15s%",          Info.UserName,          Info.UserId,
Info.UserAadhar, Info.Vaccine_name, Info.UserContactNum);

    }
}

if (flag == 0)
{
    printf("\n\t\tUser Id is not found");
}
else
{
    printf("\n\t\tInvalid Option");
}
```

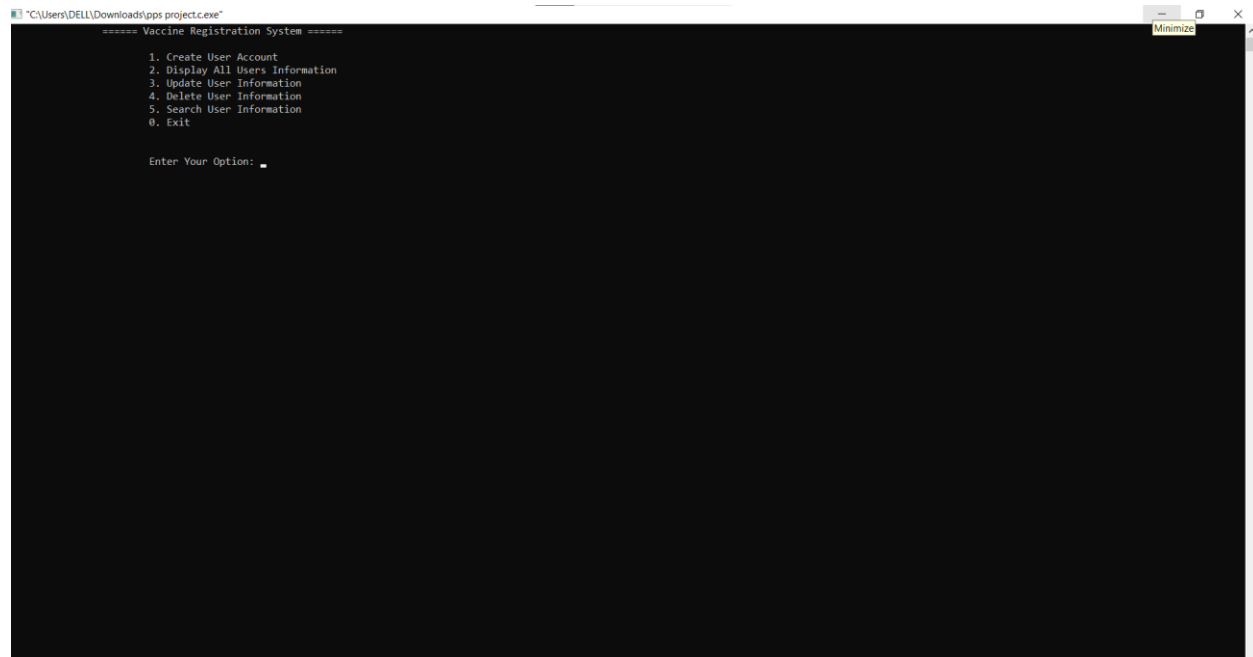
```
fclose(fileOne);

printf("\n\n\n\t\tEnter any keys to continue.....");

getch();

}
```

OUTPUT SCREEN



```
"C:\Users\DELL\Downloads\gps project\c++"
===== Vaccine Registration System =====
1. Create User Account
2. Display All Users Information
3. Update User Information
4. Delete User Information
5. Search User Information
0. Exit

Enter Your Option: _
```

```
"C:\Users\DELL\Downloads\pps project.exe"

===== Create User Account =====

Enter User's Name : Shivansh
Enter User's ID : 2003
Enter User's Aadhaar : 6678996054
Enter User's Vaccine : Covidshield
Enter User's Contact Number : 7017669980

Informations have been stored sucessfully

Enter any keys to continue.....
```

```
"C:\Users\DELL\Downloads\pps project.exe"

===== All Users Information =====

Name      ID      Aadhaar  Vaccine      Contact
-----
Shivansh   2003    6678996054Covidshield  7017669980
Manas      2002    697843246998Pfizer    4569885435
Hardika    1234    88899944455Sputnik V   6644775554
Jiiya      6789    5566445533Sputnik V   3322424244

Enter any keys to continue.....
```

```
"C:\Users\DELL\Downloads\pps project.exe"

===== Update Users Information =====

Enter User's ID : 2002

Choose your option :
1.Update User Name
2.Update User ID
3.Update User Aadhaar
4.Update User Contact No.

Enter Your Option : 4

Enter User's Contact No. to Update: 6908556646

Updated successfully!

Enter any keys to continue.....
```

```
"C:\Users\DELL\Downloads\pps project.exe"

===== Search User Information =====

Enter User ID : 1234

User Name : Hardika
User ID : 1234
User Aadhaar : 88899944455
User Vaccine : Sputnik V
User Contact No. : 6644775554

Enter any keys to continue.....
```

```
C:\Users\DELL\Downloads\pps project.exe

===== Delete User Information =====

Enter User's ID : 1234

Are you sure to delete ??
1.Yes
2.Back
Enter Your Option : 1

Information has been deleted successfully!

Enter any keys to continue.....
```

```
"C:\Users\DELL\Downloads\pps project.exe"

===== Vaccine Registration System =====

1. Create User Account
2. Display All Users Information
3. Update User Information
4. Delete User Information
5. Search User Information
0. Exit

Enter Your Option: 0

===== Thank You =====
Process returned 0 (0x0)   execution time : 1024.013 s
Press any key to continue.
```