VACCINE REGISTRATION PORTAL BY DASHY

A PROJECT REPORT

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BONAFIDE CERTIFICATE

Certified that this project report VACCINE REGISTRATION PORTAL by DASHY is the bonafide work of Aman Sirohi, Deepak Kumar Singh, Harshita Shrivastava, Srishti and Yogita Sharma who carried out the project under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and the university.

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ABSTRACT

"Vaccine Registration Portal by DASHY" is a platform for the citizens of India to register themselves for COVID-19 vaccination and schedule their vaccination at the nearest vaccination centers. As India is a big country with a huge population of 1.39billion, it is not possible to go door to door and vaccinate everyone especially in a pandemic. So we, the students of NITK have developed a project to register the people for vaccination that will also keep the record of registered people.

"Vaccine Registration Portal by DASHY " is a user friendly portal developed by keeping in mind the ease of people using this portal.

The key Feature of this project: -

- Eligibility age criteria of people as directed by GOI.
- Registration process for vaccination.
- Schedule the date of vaccination.

ACKNOWLEDGEMENT

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We are indebted to each team member for their constant encouragement, co-operation and help. Words of gratitude are not enough to describe the accommodation and fortitude which they have shown throughout this endeavor.

Ms. Tejashwini A. Gondhale

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Chapter 1

INTRODUCTION

1.1 Overview

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was first identified in December 2019 in Wuhan, China and has turned the world upside down since then. Normal life has come to a halt since its origin. Schools, Colleges and most of the institutions have been shut down because of this contagious disease and most of the people especially students have been confined to their homes only. Normal life seems like a dream to everyone especially students since this virus made its first appearance in Wuhan China.

Now finally after a wait of more than one year on 16 January 2021 India started its national vaccination programme against the SARS-CoV-2 virus which has caused the COVID-19 pandemic. The drive prioritizes healthcare and frontline workers, and those over the age of 60.

Now in such a big country with such a huge population of 1.39 billion it's very difficult to regulate the vaccination process especially when it's a pandemic going on. So Vaccine Registration Portal by DASHY is a portal to register the population of the country for an easy and hustle free vaccination.

Using this portal people will be able to register themselves for the vaccination and generate their form after registering themselves into the portal and can also have an access to a few frequently asked questions about the virus. This is an easy to access portal which will also show how many people have been registered into the portal.

Hopefully soon enough the whole population will be vaccinated and people can resume their normal life again. Until then Vaccine Registration Portal by DASHY will help in easy vaccination process.

1.2 Objective

- To make a portal for registering the population of the country for covid vaccination.
- To reduce paper work.
- To make the vaccination process easier.
- To ensure that the entire population of India is vaccinated.
- Fast and hustle free vaccination.

Chapter 2

PROBLEM FORMULATION

2.1 Problem Statement

Since the first appearance of coronavirus things have not been the same. The normal life of everyone around the world has been turned upside down. Everyone has been waiting for its vaccination since then. After a long wait, now the vaccine is finally here but to vaccinate such a huge population of 1.39 billion during a pandemic and with a highly contagious virus out there, it is not an easy task. To make the process as less human interactive as possible we need a proper registration portal. This portal will not only make the process easier but also hustle free and the government will be able to keep a check of how many people have been registered in order to fight this pandemic and make things normal how they used to be.

2.2 Hardware requirements

- 20 GB HDD Free Space
- 128 MB RAM (Atleast)
- Monitor
- Keyboard: Standard

2.3 Software requirements

Front End Tool: C Language

Back End Tool: File Handling

Platform Used: Code Blocks

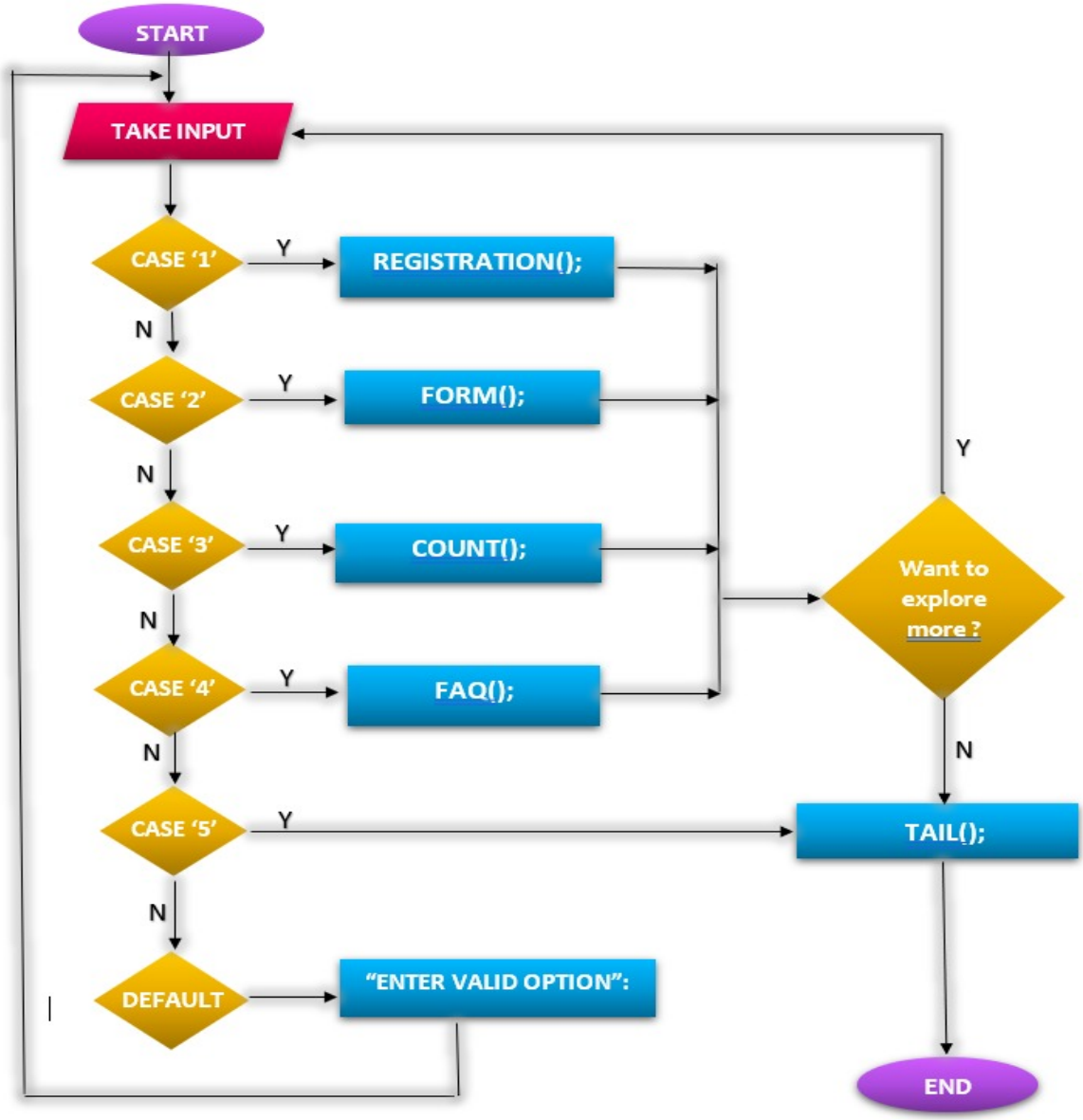
Operating System: Windows, Mac, LINUX

Chapter 3

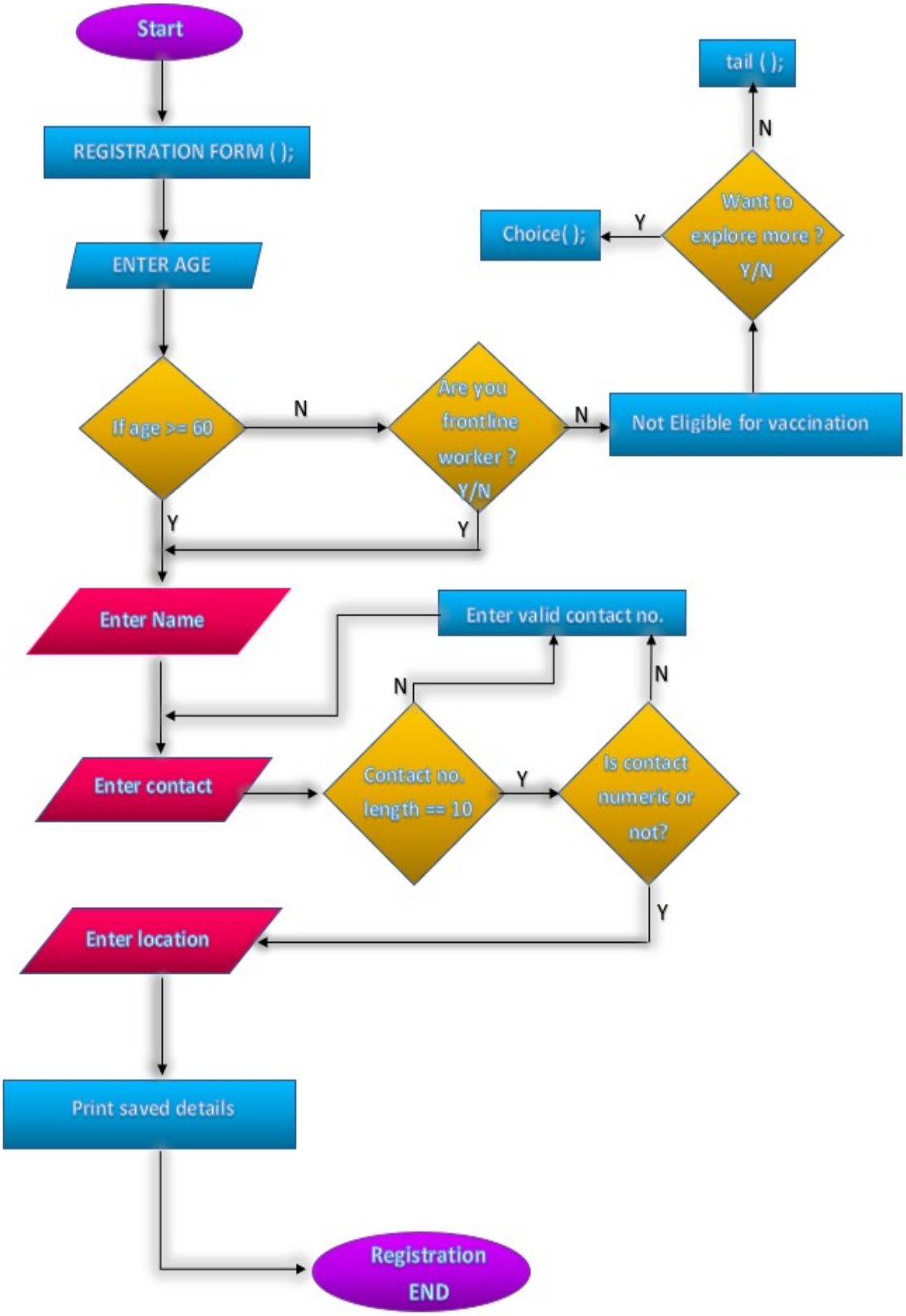
IMPLEMENTATION

3.1 Flow charts

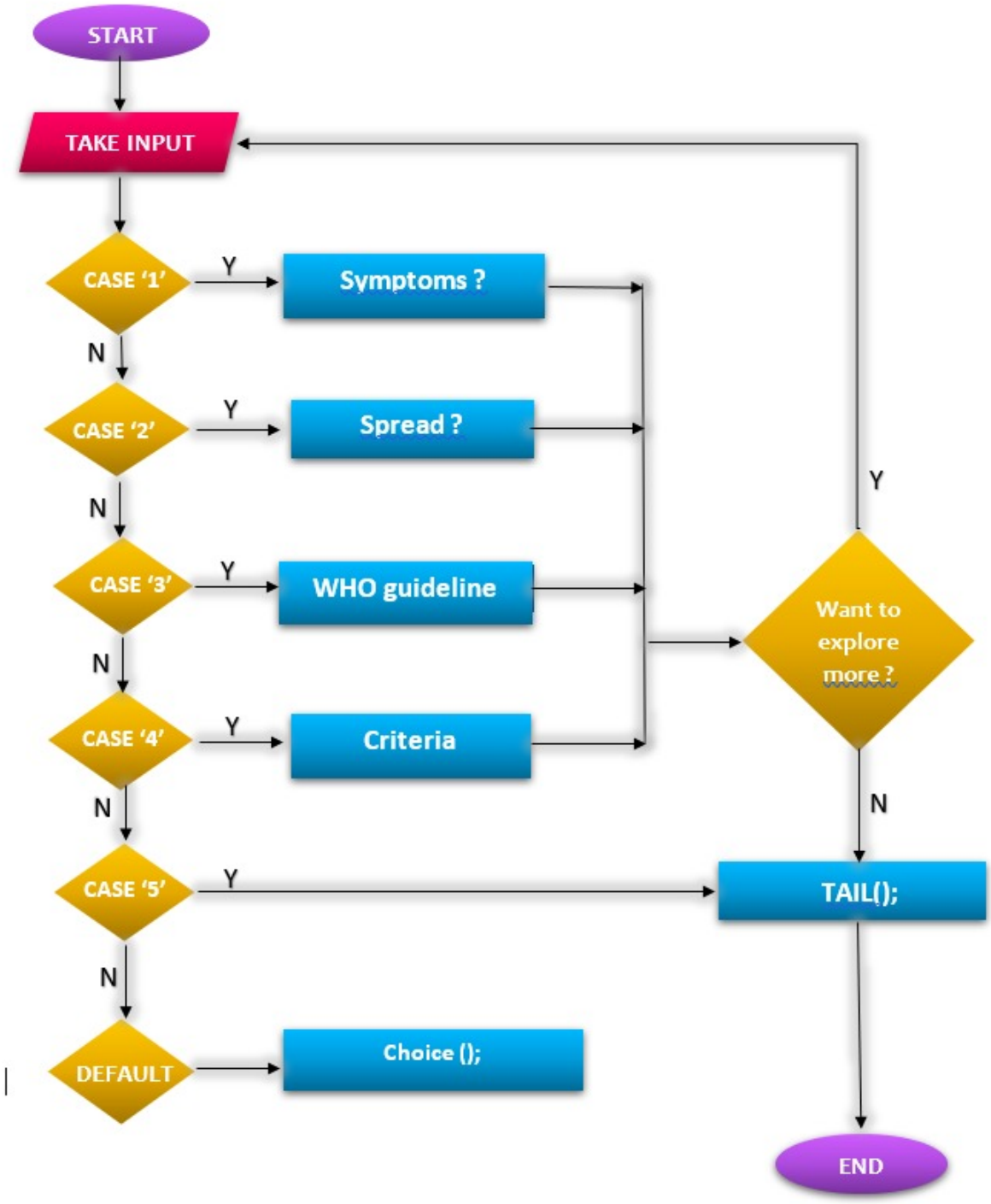
1. Main page



2. Registration form



3. FAQ


START
TAKE INPUT
CASE '1'
Y
Symptoms ?
N
CASE '2'
Y
Spread ?
N
CASE '3'
Y
WHO guideline
N
CASE '4'
Y
Criteria
N
CASE '5'
Y
N
DEFAULT
Choice ();
Want to explore more ?
Y
N
TAIL();
END

3.2 Code Explanation

If a user want to get details for COVID-19 and want to register himself/herself for Registration of Vaccine.

Here User Execute the program, hence he we'll be on Main() function.

Main()

```
int main()
{
    head();
    choice();
    return 0;
}
```

Head()

```
void head(void)
{
    printf("\nMinistry Of Health & Family welfare\nGovernment of India\n_____ \n");
    printf("\nHelpline Number : +91-11-23978046\nToll Free : 1075\nHelpline Email ID : ncov2019@gov.in\n\n\n\n");
    printf("\t\t\t\t _____\n");
    printf("\t\t\t\t|  _____ |\n");
    printf("\t\t\t\t| |                                                                                                  | |\n");
    printf("\t\t\t\t| |                        WELCOME TO COVID VACCINE REGISTRATION PORTAL BY DASHY                      | |\n");
    printf("\t\t\t\t| |_____| |\n");
    printf("\t\t\t\t|_____|\n\n");

    printf("\n\nTill everyone is vaccinated , let us not forgot our responsibilities .");
    printf("Even after receiving the covid -19 vaccine continue taking all precautions .");
    printf("\n\t>  wash your hands    \n\t>  wear masks    \n\t>  social distancing\n");
    printf("_____");
}
```

This is Header Function of Our program, it'll executed Automatically when program starts at First.

Choice()

```
void choice()
{
    char ch[4];
      do
    {
        short int op;
        printf("1. Registeration for Vaccine\n");
        printf("2. Generate your form from id\n");
        printf("3. Count Total No of Patient\n");
        printf("4. Frequently Asked Questions\n");
        printf("5. exit from portal\n\n");
        printf("Enter respective option number which you want to select :");
```

If we Select (1) then we'll move to Registration Function.

Registration()

```
void registration_form(void)
{
    int a;
    printf("\n\nEnter your age : ");
            scanf("%d", &a);
    int flag=elegibility check(a);
```

Elligiblity Through Registration Page

```
int elegibility_check(int a)
    {
        int flag=0;
        char ans[4];
        if (a >= 60)
            {
               printf("\n\nCongratulations!...You are eligible for getting the vaccination .\n You can register yourself\n ");
                flag=1;
            }
        else
        {
            printf("\nAre you a Frontline worker(yes/no) : ");
            scanf("%s", ans);
            if (strcmp(ans, "yes") == 0 || strcmp(ans, "Yes") == 0 || strcmp(ans, "YES") == 0)
            {
                printf("\n\nCongratulations!...You are eligible for getting the vaccination .\n You can register yourself\n ");
                flag=1;
            }
            else
            {
                printf("\nSorry..You are NOT eligible.Keep safety precautions till you are eligible.\n");
                printf("\tTHANK YOU!");
            }
        }
        return flag;
    }
```

If user is Elligible then he will be in this loop ofRegistration Page

Otherwisehe will be on Choice Page

Entry loop of Registration page

if(flag==1)

{

int count, last_id = 0;

*FILE *store_data, *retreive_data;*

retreive_data = fopen("store_data.txt", "r");

while (fscanf(retreive_data, "%d %s %s %s %s %d %d %d %d\n", &details.id, details.firstname, details.lastname, details.contact, details.location, &details.age,&details.day,&details.month,&details.year) != EOF)

{

last_id = details.id;

}...

Here, we have used File Handling Concept for that we have declared a structure which will be discussed after this, so we have declared the pointer here to retreive data or to store data.

And in While loop we have checked if there is any previous details available or not and by that, we keep storing details.id and finally it will work till End Of File(EOF)

And then we get our last value for details.id.

And we store that details.id in last_id.

Declared Structure

```
struct patient
{
    char firstname[20], lastname[20], contact[12], location[20];
    int age, id,day,month,year;
} details;
```

Insertion Of Basic Data from Registration Function

```
printf("\n\n\n\t Your ID is : %d", ++last_id);
details.id = last_id;
printf("\n\n\t Enter Your Following details\n");
printf("\nFirstName : ");
scanf("%s", details.firstname);
printf("\nLastName : ");
scanf("%s", details.lastname);
details.age=a;
```

It Increments Last_id, to generate a new id.

And then it will ask for First Name,Last Name.

```
int t;
do
{
    t=0;
    printf("\nContact : ");
    scanf("%s", details.contact);


    if(strlen(details.contact)!=10)
    {
        t=1;
        printf("Enter a valid phone number \n");
    }
    else
    {
        for(int i=0;i<10;i++)
        {
            if(details.contact[i]>'9' || details.contact[i]<'0')
            {
                t=1;
                printf("Enter a valid phone number in Digits \n");
                break;

            }

        }
    }

}
while(t);
printf("\nLocation : ");
scanf("%s", details.location);
```

During the insertion time, we have checked the condition for contact number length.

If it is 10, then it will proceed to next condition, otherwise it will simply print

"Enter a Valid Phone number"

Next Condition is to check whether the user is entering other characters instead of numbers, if he enters other characters it prints

"Enter a valid phone number in Digits"

and loop continues.

Otherwise it will successfully store the Contact number.

And ask for Location.

To get Current Time Automatically

```
time_t now;
time(&now);
struct tm *local = localtime(&now);
details.day = local->tm_mday;
details.month = local->tm_mon + 1;
details.year = local->tm_year + 1900;
```

We have included "#include<time.h>" to proceed this code, here we store day, month, year using local pointer of time

store_data = fopen("store_data.txt", "a");

fprintf(store_data, "%d \t%s \t%s \t%s \t%s \t%d \t%d-%d-%d\n", details.id, details.firstname, details.lastname, details.contact, details.location, details.age,details.day,details.month,details.year);

printf("\nRecord Saved successfully !\n");

printf("%d \t%s \t%s \t%s \t%s \t%d \t%d-%d-%d\nVisit %s Govt Hospital For Vaccination after Two days\n", details.id, details.firstname, details.lastname, details.contact, details.location, details.age,details.day,details.month,details.year,details.location);

fclose(store_data);

This code is used to store the data in ".txt" file , so first, we use store_data pointer and then, we used fopen() to open the file and we used 'a' to open the file in append mode. If "store_data.txt" does not exist then it will automatically create it, otherwise it will Append the data in previous data.

And we used fprintf() function to print the data in ".txt" file, we do it by using *store_data pointer and then we store the data in ".txt" file, it will finalize storing the data when we close the store_data pointer, which will be done in last.

Before, fclose(store_data) we have printed "Record Saved Successfully" and then we print the given data with a messege to visit User's City Government Hospital for Vaccination after Two days.

And We're done with Registration Function…

Now, it'll ask "Do you want to explore more ? yes/no :" because we're in Choice Function now…

Now, further it depends on user's input, if he Select yes, then again, he'll be having same function Choice(), as we have explained earlier.

Now, if the user Enters 2, then User will be on generated_form() function

Void generated_form()

```
void generated_form()
{
   FILE *read;
   read=fopen("store_data.txt","r");
   if(read==NULL)
   {
      printf("NO data Found");
      main();
   }
   int p_id;
   printf("Enter Id : ");
   scanf("%d",&p_id);
```

int flag=0;

while(fscanf(read,"%d \t%s \t%s \t%s \t%s \t%d \t%d-%d-%d\n",&details.id,details.firstname,details.lastname,details.contact,details.location,&details.age,&details.day,&details.month,&details.year)!=EOF)

{

if(details.id==p_id)…

Here we have to Enter ID to fetch the Detail of the User.

So, for that we're using File Handling and *read is the pointer here, which will be used to read the value from "store_data.txt" file.

If File Doesn't Exist then It'll print "No data Found".

Then it'll ask for User Id, after that it will scan the file using fscan() function and while loop will work till End of File(EOF).

One by one it will check for Id, if it is equal to details.id then it will proceed.

```
flag=1;
printf("\n\n\n\t\t\t_____________________________________________________________________\n");
printf("\t\t\t|                                                                     |\n");
printf("\t\t\t| |                                                                 | |\n");
printf("\t\t\t| |                        Details of the Patient By Id             | |\n");
printf("\t\t\t| |_________________________________________________________________| |\n");
printf("\t\t\t|_____________________________________________________________________|\n");
printf("\t\t\t                                                                     \n");
printf("\t\t\t    ID: %d                                                           \n", details.id);
printf("\t\t\t                                                                     \n");
printf("\t\t\t    Name: %s %s                                                      \n", details.firstname, details.lastname);
printf("\t\t\t                                                                     \n");
printf("\t\t\t    Age: %d                                                          \n", details.age);
printf("\t\t\t                                                                     \n");
printf("\t\t\t    Contact: %s                                                      \n", details.contact);
printf("\t\t\t                                                                     \n");
printf("\t\t\t    Location: %s                                                     \n",details.location);
printf("\t\t\t                                                                     \n");
printf("\t\t\t    Registration Date:  %d-%d-%d                                      \n",details.day,details.month,details.year);
printf("\t\t\t                                                                     \n");
printf("\t\t\t    Visit %s Govt Hospital For Vaccination Within Two Days            \n",details.location);
printf("\t\t\t                                                                     \n");
printf("\t\t\t _____________________________________________________________________\n");
printf("\t\t\t|_____________________________________________________________________|\n");
```

Here it is the format Code to print generated report and we have put flag=1 because later we have to check the condition, if flag is 0 then, "File Not found for the given Id".

```
if(flag==0)
{
    printf("File Not found for ID: %d\n",p_id);
}
fclose(read);
```

And We're done with generated_form() Function…

Now, it'll ask "Do you want to explore more ? yes/no :" because we're in Choice Function now…

Now, further Input depends on user, if he Select yes, then again, he'll be having same function Choice(), as we have explained earlier.

Now, if user enters 3, then user will be in total() function.

Total()

```
void total()
{
   int total=0;
   FILE *read;
   read=fopen("store_data.txt","r");
   while (fscanf(read,"%d \t%s \t%s \t%s \t%s \t%d \t%d-%d-%d\n",&details.id,details.firstname,details.lastname,details.contact,details.location,&details.age,&details.day,&details.month,&details.year)!=EOF)
   {
      total=details.id;
   }
   printf("TOTAL REGISTERED : %d\n",total);
}
```

Here, we displayed total count of Registered Users.

By using *read pointer in file handling and we open the store_data.txt, then we scan the file using fscanf() function in *read pointer, then this scanning ends at End Of File(EOF).

So the last details.id is stored in total variable, then we print the total.

Hence, we're done with total Function…

Now, it'll ask "Do you want to explore more ? yes/no :" because we're in Choice Function now…

Now, further Input depends on user, if he Select yes, then again, he'll be having same function Choice(), as we have explained earlier.

Now, if user Enter 4, then User will be on FAQ() function

FAQ()

```
void fAQ(void)
{
    int option;
    printf("\n\n\n FREQUENTLY ASKED QUESTONS....\n\n\n");
    printf("1.What are the Symptoms of corona.\n");
    printf("2.How does corona Spread ?\n");
    printf("3.WHO guidelines.\n");
    printf("4.What is the eligibility criteria.\n\n\n");
    printf("->Press 5 to Return to main menu.\n\n");
    do
    {
    printf("Enter Respective  choice :");
    scanf("%d", &option);
    printf("\n\n");
```

In FAQ() function, User has the choice to see different frequently asked questions. If the user wants to see symptoms of corona user need to press 1.

After pressing 1, covid-19 symptoms function will be called.

```
void corona symptoms(void)

{

 printf("\n\n\t\t\t\t\t\t\t * COVID - 19 SYMPTOMS *\t\t\n\n");

printf("# Most common symptoms:\n");

printf(" > Fever\n > Dry cough\n > Tiredness\n\n");

printf("# Less common symptoms:\n");

printf(" > Aches and pains\n > Sore throat\n > Diarrhoea\n > Conjunctivitis\n

Headache\n > Loss of taste or smell\n > A rash on skin, or discolouration of fingers or toes\n\n");

printf("# Serious symptoms:\n");

 printf(" > Difficulty breathing or shortness of breath\n > Chest pain or pressure\n > Loss of speech or movement.");

}
```

In FAQ() function, if user wants to check, how does corona spread, user needs to press 2.

After pressing 2, spread function will be called.

```
void spread(void)

{

 printf("\n\n\t\t\t\t\t\t\t * HOW DOES COVID - 19 SPREAD ? *\t\t\n\n");

  printf("1.  > COVID-19 is caused by the SARS-CoV-2 virus, which spreads between people, mainly when an infected person is in close contact with another person.\n  > The virus is transmitted through direct contact with respiratory droplets of an infected person (generated through coughing and sneezing). \n  > Individuals can also be infected from and touching surfaces contaminated with the virus and touching their face (e.g., eyes, nose, mouth). \n  > The COVID-19 virus may survive on surfaces for several hours,but simply disinfectants(specially alcohol based) can kill it.\n\n");

 printf("2.  Transmission can occur more easily in the Three C's:\n\n  > Crowded places with many people nearby.\n  > Close-contact settings, especially where people have conversations very near each other.\n  > Confined and enclosed spaces with poor ventilation.\n\n");

}
```

In FAQ() function, if the user wants to check guidelines given by WHO for covid-19, user needs to press 3.

After pressing 3, WHO() function will be called.

```
void who(void)
{
    printf("\n\n\t\t\t\t\t\t\t * Guidelines by WORLD HEALTH ORGANISATION *\t\t\n\n");
    printf("> Maintain at least a 1-metre distance.\n");
    printf("> Make wearing a mask is normal.\n");
    printf("> Meet people outside. Outdoor gatherings are safer than indoor ones.\n");
    printf("> Regularly and thoroughly clean your hands with Alcohol based soap.\n");
    printf("> Avoid touching your eyes, nose and mouth.\n");
    printf("> Cover your mouth and nose with your bent elbow or tissue when you cough or sneeze.\n");
    printf("> Clean and disinfect surfaces frequently especially those which are regularly touched.\n");
}
```

In FAQ() function, if the user wants to check the eligibility criteria for getting vaccine by GOI, user needs to press 4.

After pressing 4, eligibility_criteria() function will be called.

```
void eligibility_criteria(void)
{
    printf("\n\t\t\t\t\t* ELIGIBILITY CRITERIA *\n\n");

    printf("1.) In the initial phase, COVID 19 vaccine will be provided to the priority group- Health Care and Front-line workers.\n");
    printf("    The 60 plus age group may also begin early based on vaccine availability.\n\n");
    printf("2.) In the second phase, people below the age of 60 years and those above 45 and having comorbidities will be able to \n");
    printf("    receive COVID-19 vaccines first dose\n\n");
}
```

In FAQ() function, if the user wants to return to main menu user needs to press 5.

After pressing 5, user will be automatically redirected to Choice page.

Tail()

If the user wants to exit from the portal, user needs to press 5 in Choice() function.

After pressing 5, Tail() function will be called which will display a “Thanks for Visiting” message to the user.

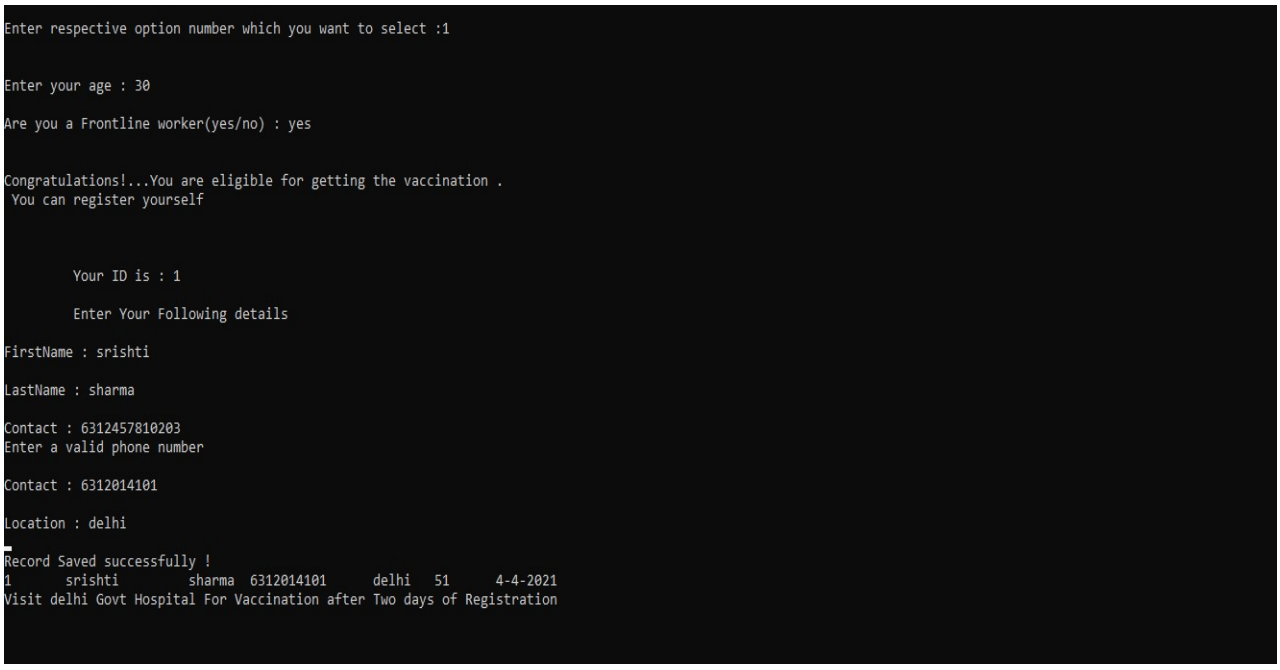
```
void tail()
{
    printf("\t\t\t\t ____________________________________________________________\n");
    printf("\t\t\t\t|  ____________________________________________________  |\n");
    printf("\t\t\t\t| |                                                    | |\n");
    printf("\t\t\t\t| |                THANKS FOR VISITING. :)             | |\n");
    printf("\t\t\t\t| |____________________________________________________| |\n");
    printf("\t\t\t\t|____________________________________________________________|\n");
    printf("\t\t\t\t                                                      DASHY\n");

}
```

3.3 Output

1. Main page

2. Registration form

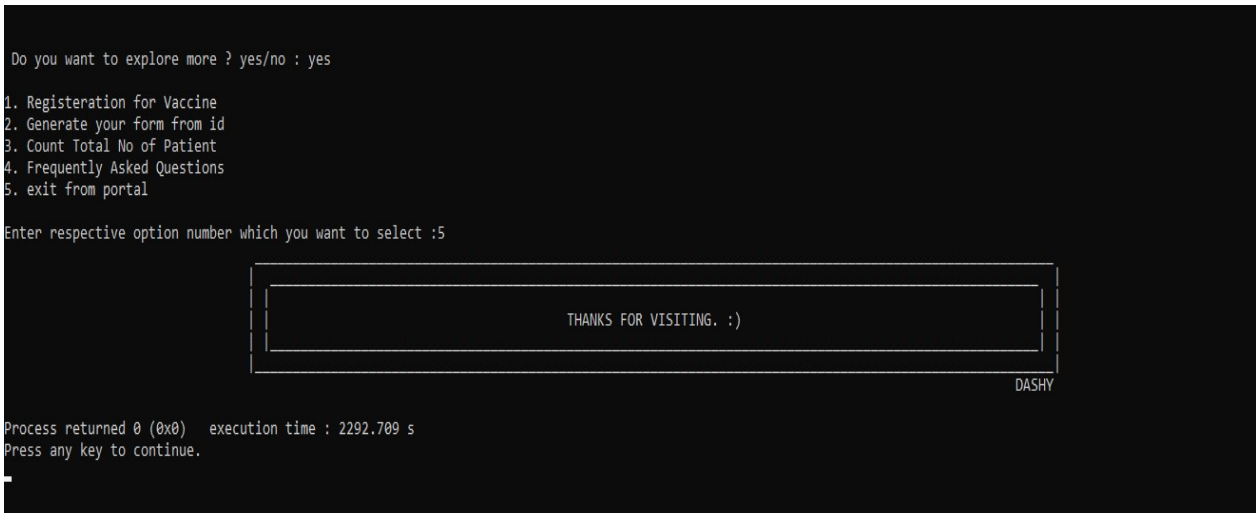


3. Generated form

4. Count of total people registered

5. Frequently asked questions

6. Exit the portal



Chapter 4

RESULT AND DISCUSSION

Vaccine Registration Portal by Dashy has rich information that can prove to be very useful for the people of the country. The outcomes of Vaccine Registration Portal by Dashy are what people need, to minimize the chaos that can be caused by physically registering at some place.

The Vaccine Registration Portal by Dashy collects the data from the user and stores it at a place from where it can be accessed readily whenever needed. The data is stored in a neat way making it user friendly and easy to interact.

Chapter 5

FUTURE SCOPE

Our project is only a humble venture to satisfy the need of the hour. Several user friendly coding measures have also been adopted. This package shall prove to be great initiative in satisfying all the requirements of the people.

The project achieves to provide a frame work that enables the user to get rich information about the pandemic at the initial of the software project and can get registered without any human interaction in some minutes as the work progresses. Moreover, the user can also retrieve the data entered at the end of the project.

The Vaccine Registration Portal by Dashy can be enhanced to some other functionalities like giving 2^{nd} dose allotment date and place, government can help financially and morally through the portal.

In future scope, the portal can move around after vaccination health care tips, routine checkup to monitor the impacts of vaccine on the users and providing online advice by expert to cases with severe effects.

Chapter 6

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