PPS MINI PROJECT REPORT

# COVID HOSPITAL MANAGEMENT SYSTEM

PROJECT DONE BY:

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# COVID HOSPITAL MANAGEMENT SYSTEM

- AIM: In this pandemic situation of Covid 19 it is very necessary to have Hospital management system to override the problems in the practicing manual system.
- This system is aimed to develop to maintain the day to day analysis.
- This is supported to eliminate and in some cases reduce the hardships faced by the existing system.

## 2 .PROBLEM STATEMENT

- The purpose is to automate the existing manual system by the help of computerized equips.
- . And also to reduce the manual work at Hospital.
- Maintain the patient data

## 3.FUNCTIONALITIES PROVIDED BY HOSPITAL MANAGEMENT SYSTEM ARE AS FOLLOWS:

- Provides the searching facilities based on the various factors such as patient, vaccination.
- It tracks the information of no. of vaccines and no. of patients added etc.
- Shows the information and description of the hospital, patient.
- Manage the information of hospital.
- Editing, adding and updating of records is improved which results in proper resource management of hospital data.

## 4.SCOPE OF THE PROJECT HOSPITAL MANAGEMENT SYSTEM:

- **It may help in collecting perfect management in details.**
- **In a very short time, the collection will be obvious and sensible.**
- **It will help a person to the management of passed year perfectly**
- **It helps in current all works relative of Hospital management** system.
- It will be also reduced the cost of collecting the management and collection procedure will go on smoothly

.

## 5.MODULES:

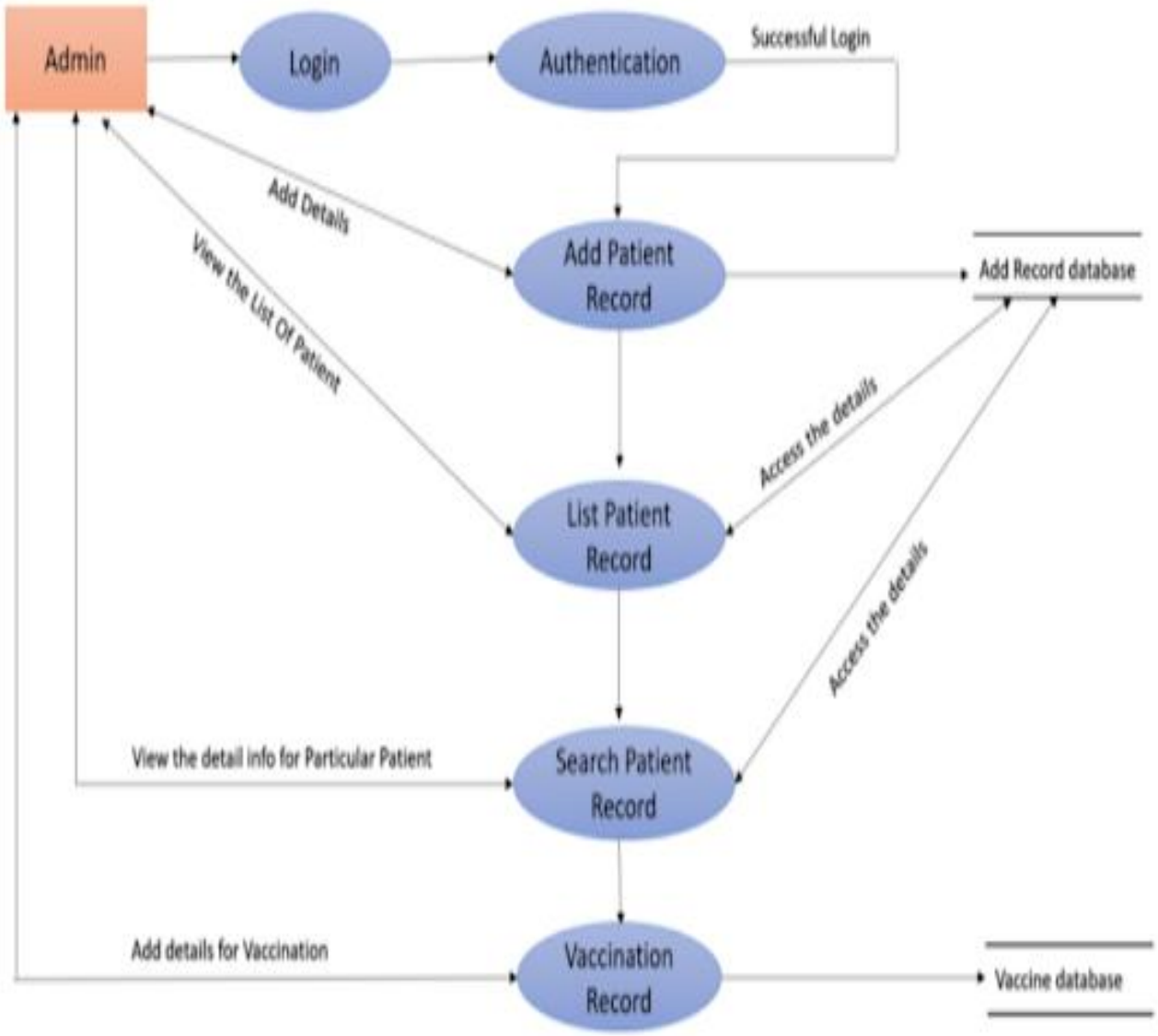
- *Hospital Management Module :*
- *Used for managing the Hospital details.*
- *Patient Module:*
- *Used to managing the Patient details.*
- *Vaccination Module:*
- *Used to manage the Vaccination details*

## 6. ALGORITHM:

- **STEP 1:** Login
- **STEP 2**: Read users Choice
- **Case1**= Add new patient Record to the system.

- **Case2**= List Patient Record from data.
- **Case3**= Search the particular patient information from existing data by using the • name of patient.
- **Case4**= Vaccination system to do vaccination at Hospital.
- **STEP 3**: Exit

## 7. DATA FLOW DIAGRAM : Covid Hospital Management System:




8) Source Code

```
#include<stdio.h>
#include<windows.h>
#include<conio.h>
#include<ctype.h>
```

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

char ans=0, ans1=0;
int ok; int b,
valid=0;
//FUNCTION DECLERATION
void
WelcomeScreen(void);
void Title(void); void
MainMenu(void); void
LoginScreen(void); void
Add_rec(void); void
func_list(); void
Search_rec(void); void
Vaccine_rec(void); void
ex_it(void);

void gotoxy(short x, short y) {
```

```
COORD pos = {x, y};
SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT
_HANDLE), pos);
}

struct patient
{
   int age; int age_v; int
   Ward_no[3]; char
   date[20]; char
   Gender; char
   Gender_v; char
   First_Name[20]; char
   Last_Name[20]; char
   Contact_no[15]; char
   Address[30]; char
   Email[30]; char
   Doctor[20]; char
   Problem[20]; char
      Name[20]; char
```

```
    Last_Name_v[20];
    char Vaccine[20];
    char Aadhar_no[15];
};

struct patient p,temp_c;


 int main(void)
{

    WelcomeScreen();//Use to call WelcomeScreen
function
    Title();//Use to call Title function
    LoginScreen();//Use to call Menu function
}
/* ****** Welcome Screen ****** */
void WelcomeScreen(void)
{
```

```
   printf("\n\n\n\n\n\n\n\t\t\t####################
########################");
   printf("\n\t\t\t\t#\t\t WELCOME TO\t\t#");
   printf("\n\t\t\t\t#       COVICURE HOSPITAL
SYSTEM       #");
   printf("\n\t\t\t\t################################
############"); printf("\n\n\n\n\n Press any key to
   continue......\n"); getch();//Use to holds screen for
   some seconds system("cls");

}
/* ****** Title Screen ****** */
void Title(void)
{ printf("\n\n\t\t-----------------------------------------
------------------------------");
   printf("\n\t\t\t\t        COVICURE HOSPITAL        ");
   printf("\n\t\t-----------------------------------------
-------------------------");
}
/* ****** Main Menu ****** */
void MainMenu(void)
```

```
{
   system("cls");
   int choose;
   Title();// call Title function
   printf("\n\n\n\n\n\t\t\t\t1. Add Patients Record\n");
   printf("\n\t\t\t\t2. List Patients Record\n");
   printf("\n\t\t\t\t3. Search Patients Record\n");
   printf("\n\t\t\t\t4. Vaccination Record\n");
   printf("\n\t\t\t\t5. Exit\n"); printf("\n\n\n
   \n\t\t\t\tChoose from 1 to 5:"); scanf("%i",
   &choose);
   switch(choose)
   {

   case 1:
   Add_rec();
      break;
   case 2:
```

```
        func_list();
        break;
    case 3:
    Search_rec();
        break;
    case 4:
        Vaccine_rec();
        break;
    case 5:
        ex_it();
        break;
        default:
        printf("\t\t\tInvalid entry. Please enter right
option :)");
        getch();
    }

}
/* ****** Exit Screen ****** */
void ex_it(void)
```

```
{
   system("cls");
   Title();
   printf("\n\n\n\n\n\t\t\tTHANK YOU FOR
VISITING :)");
   getch();

}
/* ****** Login Screen ****** */
void LoginScreen(void)
{
int e=0 ;
int i;
char Username[15]; char
Password[15]; char ch; char
original_Username[25]="admin";
char original_Password[15]="1234";

do
{
```

```
   printf("\n\n\n\n\t\t\t\tEnter your Username and
Password :)");
   printf("\n\n\n\t\t\t\t\tUSERNAME:");
   scanf("%s",&Username);

   printf("\n\n\t\t\t\t\tPASSWORD:");

    for(i=0;i<10;i++)
{
    ch=getch();
    Password[i]=ch;
    if(ch!=13)
    printf("*");
    if(ch==13)
       break;
}
Password[i]='\0';
```

```
   {
      if (strcmp(Username,original_Username)==0 &&
strcmp(Password,original_Password)==0)

   { printf("\n\n\n\t\t\t\t\t...Login Successfull...");

      getch();
      MainMenu();
      break;
   }
   else
   {
      printf("\n\t\t\tPassword in incorrect:( Try
Again :)");
      e++;

      getch();
   }

 }
```

```
}
while(e<=3);
   if(e>3)
   {
   printf("You have cross the limit. You cannot
login. :( :("); getch(); ex_it();
   }

system("cls");
}


/* ****ADD RECORD*****/

void Add_rec(void)
{
   system("cls");
   Title();
```

```
    char ans; FILE*ek;
ek=fopen("Record2.dat","a");
printf("\n\n\t\t\t!!!!!!!!!!!!!! Add Patients
Record !!!!!!!!!!!!!\n");

    /* ****First Name***** */
    A:
    printf("\n\t\t\tFirst Name: ");
    scanf("%s",p.First_Name);
    p.First_Name[0]=toupper(p.First_Name[0]);
    if(strlen(p.First_Name)>20||strlen(p.First_Name)<2)
    {
        printf("\n\t Invalid :( \t The max range for first
name is 20 and min range is 2 :)");
        goto A;
    }
    else
    {
        for (b=0;b<strlen(p.First_Name);b++)
        {
```

```
        if (isalpha(p.First_Name[b]))
        {
           valid=1;
        }
        else
        {
           valid=0;
           break;
        } }
     if(!valid)
     {
        printf("\n\t\t First name contain Invalid
character :( Enter again :)"); goto
        A;
     }
  }

  /* ****** Last name ****** */
  B:
```

```
   printf("\n\t\t\tLast Name: ");
   scanf("%s",p.Last_Name);
   p.Last_Name[0]=toupper(p.Last_Name[0]);
   if(strlen(p.Last_Name)>20||strlen(p.Last_Name)<2)
   {
      printf("\n\t Invalid :( \t The max range for last
name is 20 and min range is 2 :)");
      goto B;
   }
   else
   {
      for (b=0;b<strlen(p.Last_Name);b++)
      {
         if (isalpha(p.Last_Name[b]))
         {
            valid=1;
         }
         else
         {
```

```
            valid=0;
            break;
          } }
       if(!valid)
       {
          printf("\n\t\t Last name contain Invalid
character :( Enter again :)"); goto
          B;
       }
   }
/* ***** Gender ******** */
   do
   {
       printf("\n\t\t\tGender[F/M]: ");
       scanf(" %c",&p.Gender);
       if(toupper(p.Gender)=='M'||
toupper(p.Gender)=='F')
       {
          ok =1;
       }
```

```
        else
        {
        ok =0;
        }
        if(!ok)
        {
            printf("\n\t\t Gender contain Invalid
character :( Enter either F or M :)");
        }
     } while(!ok);
/* ***** Age ********** */
 do{
  X: printf("\n\t\t\tAge:"); scanf("
    %i",&p.age);

    if(p.age>=120)
    {
        printf("\n\t\t\t Invalid Age");
            goto X;
    }
```

```
}
while(!valid);
/* ***** Address ******** */
   do
   {
   C: printf("\n\t\t\tAddress:
   "); scanf("%s",p.Address);
   p.Address[0]=toupper(p.Address[0]);
   if(strlen(p.Address)>20||strlen(p.Address)<4)
   {
      printf("\n\t Invalid :( \t The max range for address
is 20 and min range is 4 :)");
      goto C;
   }

}while(!valid);
/* ***** Contact no. ***** */
do
{
   D:
```

```
   printf("\n\t\t\tContact no: ");
scanf("%s",p.Contact_no);
if(strlen(p.Contact_no)>10||strlen(p.Contact_no)!=1 0)
   {
      printf("\n\t Sorry :( Invalid. Contact no. must
contain 10 numbers. Enter again :)");
      goto D;
   }
   else
   {
      for (b=0;b<strlen(p.Contact_no);b++)
      {
         if (!isalpha(p.Contact_no[b]))
         {
            valid=1;
         }
         else
         {
            valid=0;
            break;
```

```
        } }
      if(!valid)
      {
        printf("\n\t\t Contact no. contain Invalid
character :( Enter again :)"); goto
        D;
      }
   }
}while(!valid);
/* ****** Email ****** */
do
{ printf("\n\t\t\tEmail: ");
   scanf("%s",p.Email); if
   (strlen(p.Email)>30||strlen(p.Email)<8)
   {
     printf("\n\t Invalid :( \t The max range for email is
30 and min range is 8 :)");
   }
}while(strlen(p.Email)>30||strlen(p.Email)<8);
/* ******* Problem ******* */
```

```
E:
printf("\n\t\t\tProblem: ");
scanf("%s",p.Problem);
p.Problem[0]=toupper(p.Problem[0]);
if(strlen(p.Problem)>15||strlen(p.Problem)<3)
{
    printf("\n\t Invalid :( \t The max range for first name is 15 and min range is 3 :)");
    goto E;
}
else
{
    for (b=0;b<strlen(p.Problem);b++)
    {
        if (isalpha(p.Problem[b]))
        {
            valid=1;
        }
        else
        {
```

```
            valid=0;
            break;
        }
    }
    if(!valid)
    {
        printf("\n\t\t Problem contain Invalid
character :( Enter again :)"); goto
        E;
    }
  }
/* ****** Prescribed Doctor ****** */
  F:
  printf("\n\t\t\tPrescribed Doctor:");
  scanf("%s",p.Doctor);
  p.Doctor[0]=toupper(p.Doctor[0]);
  if(strlen(p.Doctor)>30||strlen(p.Doctor)<2)
  {
    printf("\n\t Invalid :( \t The max range for first
```

```
name is 30 and min range is 2 :)");
        goto F;
    }
    else
    {
        for (b=0;b<strlen(p.Doctor);b++)
        { if (isalpha(p.Doctor[b]))
            {
                valid=1;
            }
            else
            {
                valid=0;
                break;
            } }
        if(!valid)
        {
            printf("\n\t\t Doctor name contain Invalid
character :( Enter again :)"); goto
            F;
```

```
        }
    }
    fprintf(ek," %s %s %c %i %s %s %s %s %s\n",
p.First_Name, p.Last_Name, p.Gender, p.age,
p.Address, p.Contact_no, p.Email, p.Problem,
p.Doctor);
    printf("\n\n\t\t\t.... Information Record
Successful ...");
    fclose(ek);//ek file is closed
    sd:
    getch(); printf("\n\n\t\t\tDo you want to add
    more[Y/N]?? "); scanf(" %c",&ans); if
    (toupper(ans)=='Y')
    {
        Add_rec();
    }
    else if(toupper(ans)=='N')
    {
        printf("\n\t\t Thank you :) :)");
        getch();
        MainMenu();
```

```
    }
    else
    { printf("\n\t\tInvalid Input\n");
        goto sd;
    }
}
/* ****VIEW RECORD*****/
void func_list()
{
    int row;
    system("cls");
    Title();
    FILE *ek; ek=fopen("Record2.dat","r");
    printf("\n\n\t\t\t!!!!!!!!!!!!!! List Patients
Record !!!!!!!!!!!!\n");
    gotoxy(1,15);
        printf("Full Name");
        gotoxy(20,15);
        printf("Gender");
        gotoxy(32,15); printf("Age");
```

```
        gotoxy(37,15);
        printf("Address");
        gotoxy(49,15); printf("Contact
        No."); gotoxy(64,15);
        printf("Email"); gotoxy(88,15);
        printf("Problem");
        gotoxy(98,15);
        printf("Prescribed Doctor\n");
       printf("==================================
==========================================
================================="); row=17;
        while(fscanf(ek,"%s %s %c %i %s %s %s %s %s\n",
p.First_Name, p.Last_Name,
                    &p.Gender, &p.age, p.Address,
p.Contact_no, p.Email, p.Problem, p.Doctor)!=EOF)
        {
           gotoxy(1,row);
           printf("%s %s",p.First_Name, p.Last_Name);
           gotoxy(20,row); printf("%c",p.Gender);
           gotoxy(32,row); printf("%i",p.age);
           gotoxy(37,row); printf("%s",p.Address);
```

```
            gotoxy(49,row); printf("%s",p.Contact_no);
            gotoxy(64,row); printf("%s",p.Email);
            gotoxy(88,row); printf("%s",p.Problem);
            gotoxy(98,row); printf("%s",p.Doctor);
            row++;
        }
        fclose(ek);
        getch();
        MainMenu();
}
void Search_rec(void)
{
    char name[20];
    char namel[20];
    system("cls");
    Title();// call Title function
    FILE *ek;
    ek=fopen("Record2.dat","r");
    printf("\n\n\t\t\t!!!!!!!!!!!!!! Search Patients
```

```
Record !!!!!!!!!!!!\n"); gotoxy(12,8); printf("\n
   Enter Patient Name to be viewed:");
   scanf("%s",name); fflush(stdin); printf("\n
   Enter Last Name:"); scanf("%s",namel);
   fflush(stdin); name[0]=toupper(name[0]);
   namel[0]=toupper(namel[0]);
   while(fscanf(ek,"%s %s %c %i %s %s %s %s
   %s\n",
p.First_Name, p.Last_Name, &p.Gender, &p.age,
p.Address, p.Contact_no, p.Email, p.Problem,
p.Doctor)!=EOF)
   {
      if(strcmp(p.First_Name,name)==0 &&
strcmp(p.Last_Name,namel)==0)
      {
         gotoxy(1,15);
         printf("Full Name");
         gotoxy(25,15);
         printf("Gender");
         gotoxy(32,15);
```

```
        printf("Age");
        gotoxy(37,15);
        printf("Address");
        gotoxy(52,15);
        printf("Contact No.");
        gotoxy(64,15);
        printf("Email");
        gotoxy(80,15);
        printf("Problem");
        gotoxy(95,15);
        printf("Prescribed
        Doctor\n");
        printf("==========
==========
==========");
        gotoxy(1,18); printf("%s %s",p.First_Name,
        p.Last_Name); gotoxy(25,18);
        printf("%c",p.Gender); gotoxy(32,18);
        printf("%i",p.age); gotoxy(37,18);
        printf("%s",p.Address); gotoxy(52,18);
```

```
        printf("%s",p.Contact_no); gotoxy(64,18);
        printf("%s",p.Email); gotoxy(80,18);
        printf("%s",p.Problem); gotoxy(95,18);
        printf("%s",p.Doctor);
        printf("\n"); break;
      }
     }
     if(strcmp(p.First_Name,name)!=0 ||
strcmp(p.Last_Name,namel)!=0)
     {

      printf("\n\n Record not found!");
      getch();
     }
   fclose(ek);
   L:
   getch(); printf("\n\n\t\t\tDo you want to view
   more[Y/N]??"); scanf("%c",&ans); if
   (toupper(ans)=='Y')
   {
```

```
        Search_rec();
    }
    else if(toupper(ans)=='N')
    {
        printf("\n\t\t Thank you :) :)");
        getch();
        MainMenu();
    }
    else
    {  printf("\n\tInvalid  Input.\n");
        goto L;
    }
}
/*vaccine record*/

void Vaccine_rec(void)
{
    system("cls");
    Title();
```

```
   char ans1; FILE*ekk;
ekk=fopen("recordvacc.dat","a");
printf("\n\n\t\t\t!!!!!!!!!!!!!! Vaccination
System!!!!!!!!!!!!!\n"); K:
   printf("\n\t\t\t Name Of Candidate: ");
   scanf("%s",p.Name);
   p.Name[0]=toupper(p.Name[0]);
   if(strlen(p.Name)>20||strlen(p.Name)<2)
   {
       printf("\n\t Invalid :( \t The max range for name is
20 and min range is 2 :)");
      goto K;
   }
   else
   {
      for (b=0;b<strlen(p.Name);b++)
      {
         if (isalpha(p.Name[b]))
         {
            valid=1;
```

```
        }
        else
        {
           valid=0;
           break;
        } }
      if(!valid)
      {
         printf("\n\t\t First name contain Invalid
character :( Enter again :)"); goto
         K;
      }
   }



      H:
   printf("\n\t\t\tLast Name: ");
   scanf("%s",p.Last_Name_v);
```

```
   p.Last_Name_v[0]=toupper(p.Last_Name_v[0]);
if(strlen(p.Last_Name_v)>20||strlen(p.Last_Name_v)
<2)
   {
      printf("\n\t Invalid :( \t The max range for last
name is 20 and min range is 2 :)");
      goto H;
   }
   else
   {
      for (b=0;b<strlen(p.Last_Name_v);b++)
      {
         if (isalpha(p.Last_Name_v[b]))
         {
            valid=1;
         }
         else
         {
            valid=0;
            break;
```

```
        }
    }
    if(!valid)
    {
        printf("\n\t\t Last name contain Invalid
character :( Enter again :)"); goto
        H;
    }
}
    do{
z:

printf("\n\t\t\tAge:");
scanf(" %i",&p.age_v);

if(p.age_v>=120)
{
    printf("\n\t\t\t Invalid Age");
    goto z;
}
```

```
}
while(!valid);
   /****/
      do
   {
      printf("\n\t\t\tGender[F/M]: ");
      scanf(" %c",&p.Gender_v);
      if(toupper(p.Gender_v)=='M'||
toupper(p.Gender_v)=='F')
      {
         ok =1;
      }
      else
      {
      ok =0;
      }
      if(!ok)
      {
         printf("\n\t\t Gender contain Invalid
character :( Enter either F or M :)");
```

```
        }
     } while(!ok);
    printf("n\n\n\t\t Date of Vaccination (dd/mm/yy): ");
    scanf("%s",&p.date);

    /*                              adhar no */
    do
{ J:
    printf("\n\t\t\tAadhar No.: ");
    scanf("%s",p.Aadhar_no);
    if(strlen(p.Aadhar_no)>12||strlen(p.Aadhar_no)!=12)
    {
        printf("\n\t Sorry :( Invalid. Contact no. must
contain 12 numbers. Enter again :)");
        goto J;
    }
    else
    {
        for (b=0;b<strlen(p.Aadhar_no);b++)
        {
```

```
        if (!isalpha(p.Aadhar_no[b]))
        {
           valid=1;
        }
        else
        {
           valid=0;
           break;
        } }
      if(!valid)
      {
         printf("\n\t\t Aadhar no. contain Invalid
character :( Enter again :)"); goto
         J;
      }
   }
}while(!valid);


   struct vaccine
```

```
{
    char covaxin[10];
    char covishield[10];
    char sputnik[10];

};

struct vaccine v,temp_c;

printf("\n\n\n\t Choose Vaccine from Follow :");

   {

int choose;

printf("\n\n\n\n\n\t\t\t\t1. Covaxin\n");
printf("\n\t\t\t\t2. Covishield\n"); printf("\n\t\t\t\t3.
Sputnik\n"); printf("\n\n\n \n\t\t\t\tChoose from 1
to 3:"); scanf("%i", &choose);
```

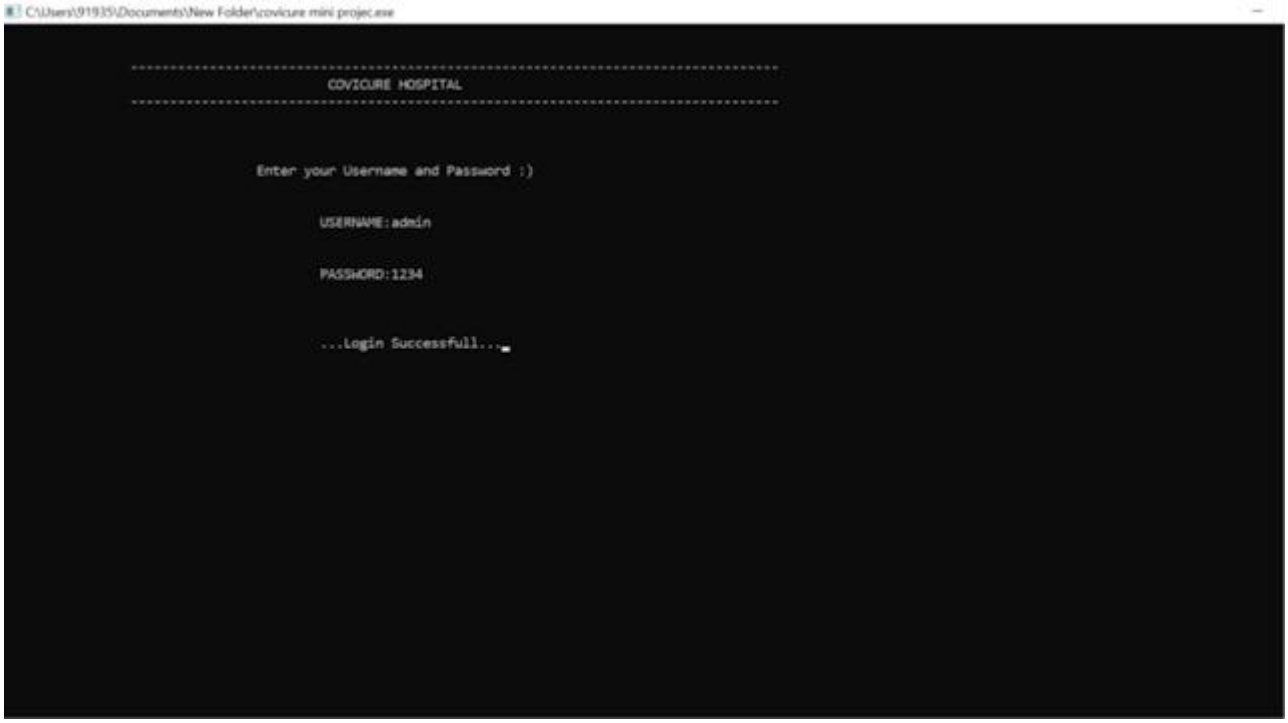
```
   switch(choose)
   {


   case 1:
       printf("\n\n\n\n\t\t\t Registration successful for
Covaxine"); strcpy(p.Vaccine,
       "COVAXIN"); break;
   case 2:
        printf("\n\n\n\n\t\t\t Registration successful for
Covishield"); strcpy(p.Vaccine,
        "COVISHIELD");
       break;
   case 3:
   printf("\n\n\
   n\n\t\t\t
   Registration
   successful
   for
Sputnik"); strcpy(p.Vaccine,
        "SPUTNIK");
```

```
        break;


    default:
        printf("\t\t\tInvalid entry. Please enter right
option :)");


        getch();
    }









    }


    fprintf(ekk," %s %s %i %c %c %s %s %s\n",
p.Name,p.Last_Name_v, p.age_v, p.age,
p.Gender_v,p.date,p.Aadhar_no,p.Vaccine);
printf("\n\n\t\t\t.... Information Record
Successful ...");
    fclose(ekk);
```

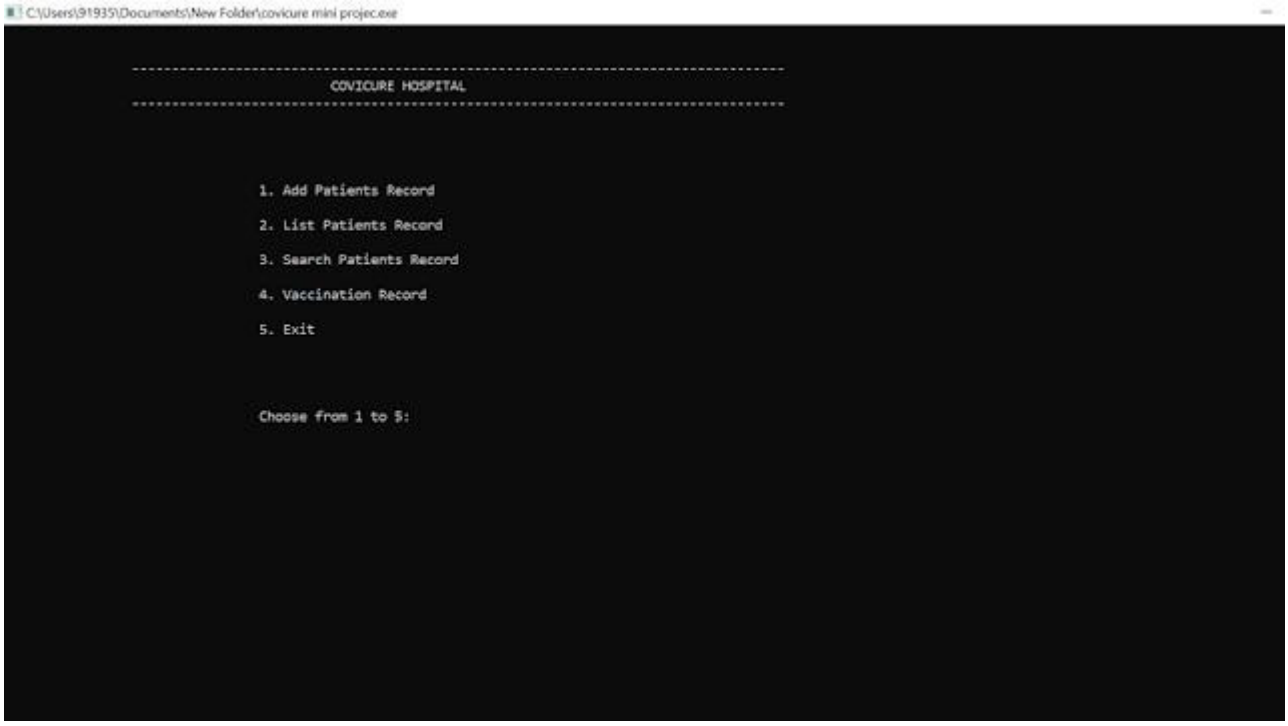
```
    L:
  getch();
  printf("\n\n\t\t\tDo you want to Exit[Y/N]??");
  scanf("%c",&ans); if (toupper(ans)=='Y')
  {
    MainMenu();
  }
  else if(toupper(ans)=='N')
  {
    printf("\n\t\t Thank you :) :)");
    getch();
    MainMenu();
  }
  else
  {
    printf("\n\tInvalid Input.\n");
    goto L;
  }
}
```

## 8.INPUT & OUTPUT SCREENSHOTS:

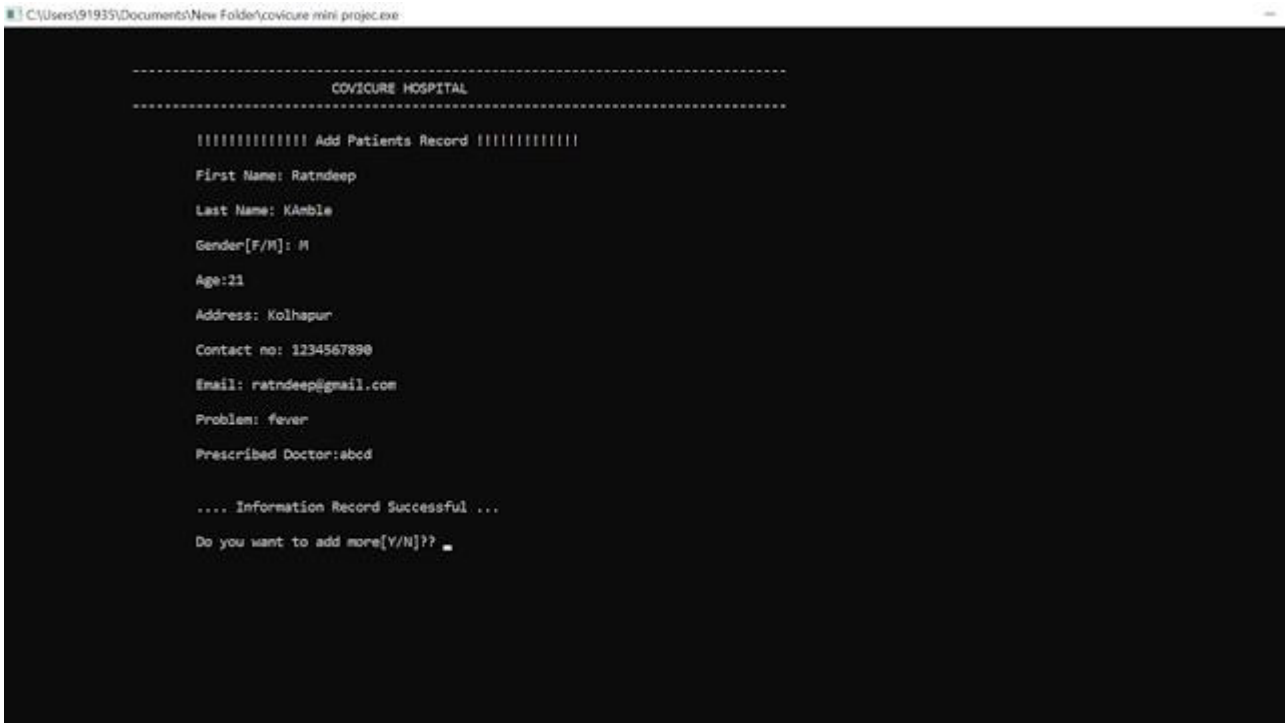
1)


C:\Users\91935\Documents\New Folder\covicure mini projec.exe
COVICURE HOSPITAL
Enter your Username and Password :)
USERNAME:admin
PASSWORD:1234
...Login Successfull...

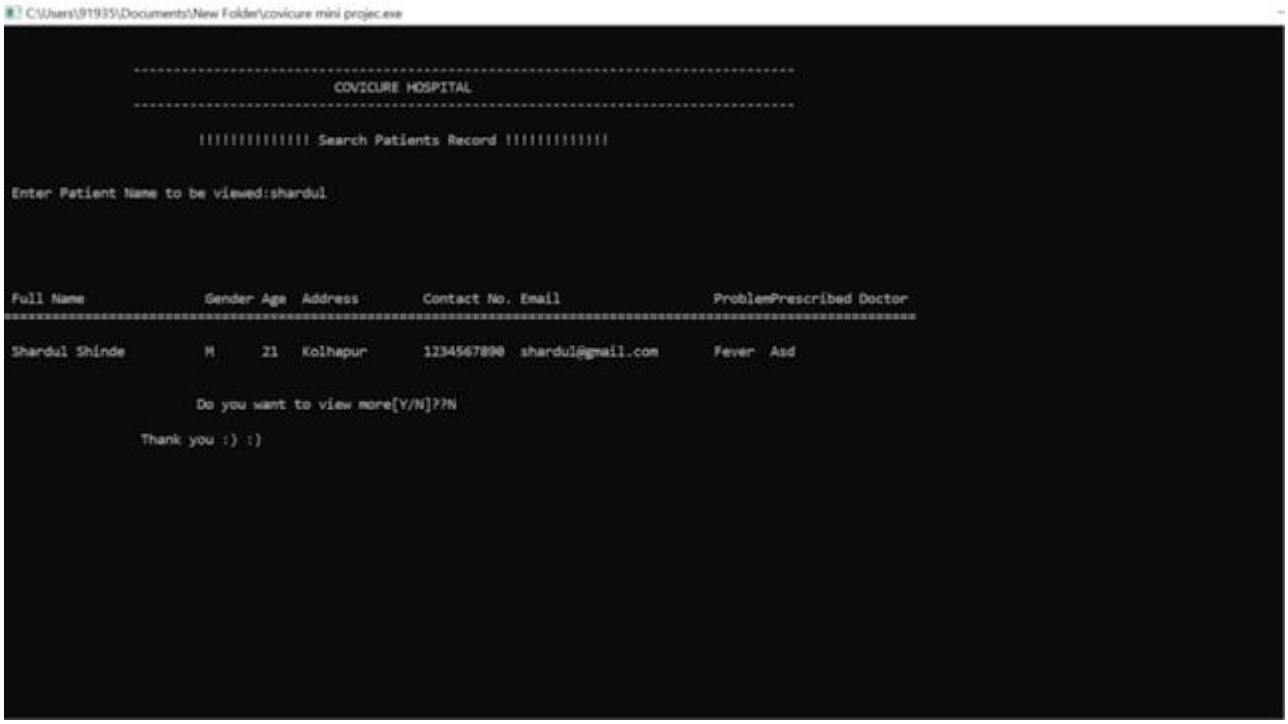
2)


C:\Users\91935\Documents\New Folder\covicure mini projec.exe
COVICURE HOSPITAL
1. Add Patients Record
2. List Patients Record
3. Search Patients Record
4. Vaccination Record
5. Exit
Choose from 1 to 5:

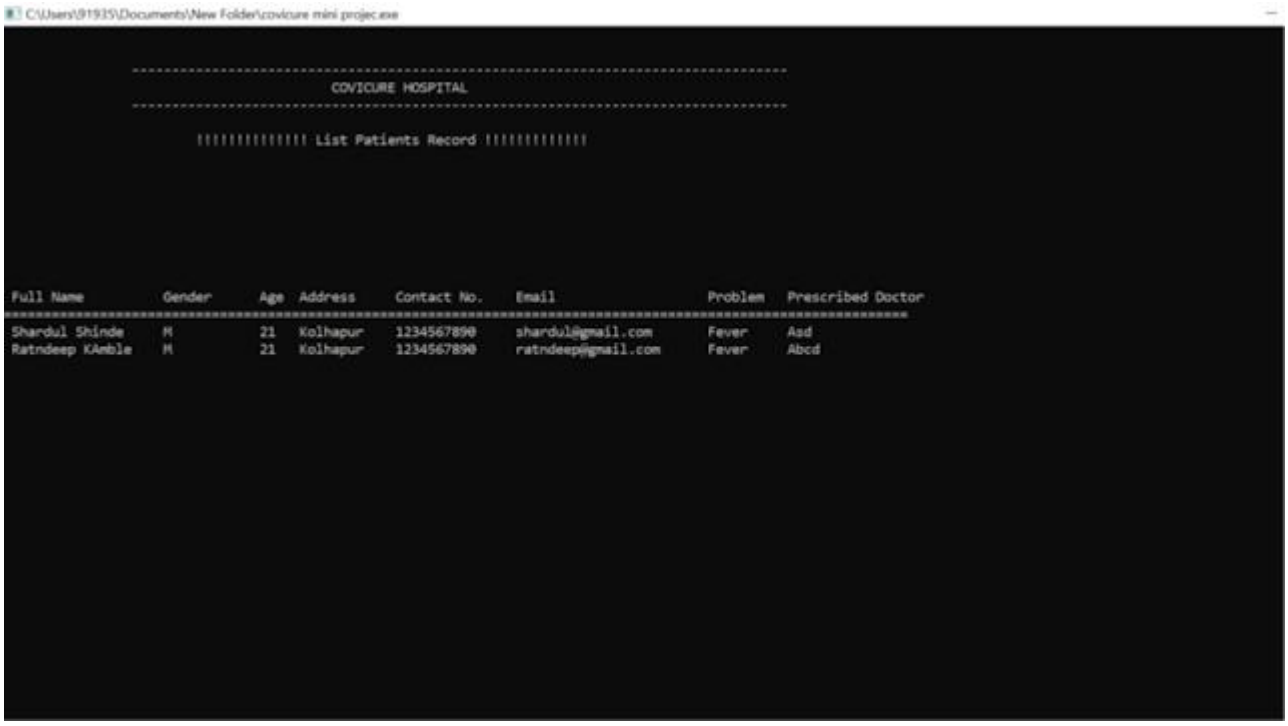
3)


C:\Users\91935\Documents\New Folder\covicure mini projec.exe
COVICURE HOSPITAL
!!!!!!!!!!!!!! Add Patients Record !!!!!!!!!!!!!!
First Name: Ratndeep
Last Name: KAmble
Gender[F/M]: M
Age:21
Address: Kolhapur
Contact no: 1234567890
Email: ratndeep@gmail.com
Problem: fever
Prescribed Doctor:abcd
.... Information Record Successful ...
Do you want to add more[Y/N]??

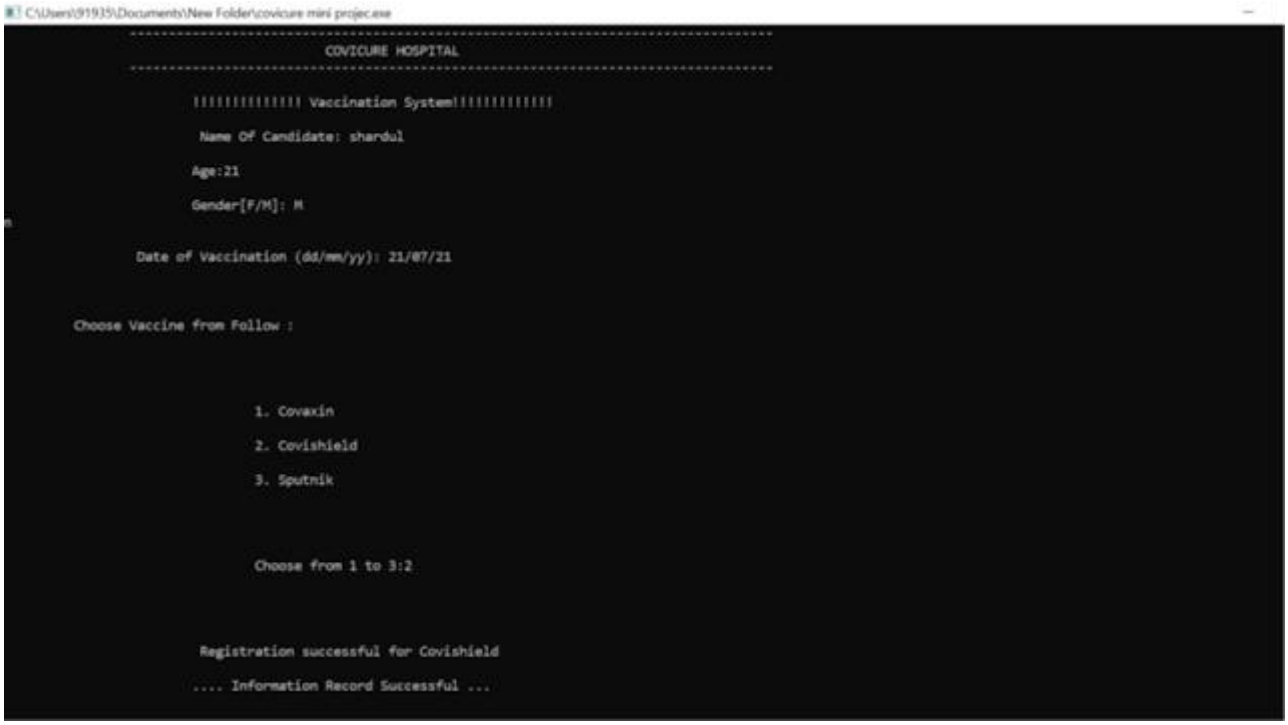
4)


C:\Users\91935\Documents\New Folder\covicure mini projec.exe
COVICURE HOSPITAL
!!!!!!!!!!!!!! Search Patients Record !!!!!!!!!!!!!!
Enter Patient Name to be viewed:shardul
Full Name Gender Age Address Contact No. Email Problem Prescribed Doctor
Shardul Shinde M 21 Kolhapur 1234567890 shardul@gmail.com Fever Asd
Do you want to view more[Y/N]?N
Thank you :) :)

5)




6)




RESULT : **Covid Hospital Management System Successfully Completed”**