## PPS MINI PROJECT REPORT

# COVID HOSPITAL MANAGEMENT SYSTEM

Project Report by:

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CSE w/s IOT

U2 section

#### **COVID HOSPITAL MANAGEMENT SYSTEM**

- <u>AIM:</u> 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
- <u>Case1</u> = Add new patient Record to the system.
- Case2 = List Patient Record from data.
- <u>Case3</u>= Search the particular patient information from existing data by using the
- name of patient.
- <u>Case4</u>= 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\t\t\t#\t\ WELCOME TO\t\t#");
 printf("\n\t\t\t#
                COVICURE HOSPITAL
SYSTEM
        #"):
 ########;
 printf("\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\ COVICURE HOSPITAL ");
 printf("\n\t\t-----
----");
/* ***** Main Menu ***** */
void MainMenu(void)
{
 system("cls");
 int choose;
 Title();// call Title function
 printf("\n\n\n\n\t\t\t1. Add Patients Record\n");
 printf("\n\t\t\t2. List Patients Record\n");
 printf("\n\t\t\t3. Search Patients Record\n");
 printf("\n\t\t\t4. Vaccination Record\n");
  printf("\n\t\t\t5. Exit\n");
  printf("\n\n\n\t\t\t\t\choose 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\tInvalid entry. Please enter right
option:)");
    getch();
  }
/* ***** Exit Screen ***** */
void ex_it(void)
{
  system("cls");
  Title();
  printf("\n\n\n\t\t\t\t
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\t\t\tEnter your Username and
Password:)");
  printf("\n\n\t\t\t\t\tUSERNAME:");
  scanf("%s",&Username);
  printf("\n\n\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\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");
 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++)</pre>
    {
      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\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++)</pre>
    {
       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\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\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\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++)</pre>
    {
       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\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);</pre>
/* ****** 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++)</pre>
    {
       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++)</pre>
    {
       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\.... Information Record
Successful ...");
  fclose(ek);//ek file is closed
  sd:
  getch();
  printf("\n\n\t\t\Do 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");
  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");
   ______
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");
  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");
     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\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\tlnvalid Input.\n");
    goto L;
  }
}
/*vaccine record*/
void Vaccine_rec(void)
{
  system("cls");
  Title();
```

```
char ans1;
  FILE*ekk;
  ekk=fopen("recordvacc.dat","a");
  System!!!!!!!!\n");
    K:
  printf("\n\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++)</pre>
    {
      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++)</pre>
    {
      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\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\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\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++)</pre>
    {
       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\t Choose Vaccine from Follow :");
   {
  int choose;
  printf("\n\n\n\t\t\t\t. Covaxin\n");
```

```
printf("\n\t\t\t2. Covishield\n");
  printf("\n\t\t\t3. Sputnik\n");
  printf("\n\n\n\t\t\t\tChoose from 1 to 3:");
  scanf("%i", &choose);
  switch(choose)
  {
  case 1:
    printf("\n\n\n\t\t\t Registration successful for
Covaxine");
    strcpy(p.Vaccine, "COVAXIN");
    break;
  case 2:
     printf("\n\n\n\t\t\t Registration successful for
Covishield");
     strcpy(p.Vaccine, "COVISHIELD");
    break;
  case 3:
```

```
printf("\n\n\n\t\t\t Registration successful for
Sputnik");
    strcpy(p.Vaccine, "SPUTNIK");
    break;
  default:
    printf("\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\.... Information Record
Successful ...");
  fclose(ekk);
    L:
  getch();
  printf("\n\n\t\t\Do 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	
Order the line	
,	
1. Add Patients Record	
2. List Patients Record	
3. Search Patients Record	
4. Vaccination Record	
5. Exit	
Choose from 1 to 5:	
Choose True 2 to 31	
,	

3)

C\Users\91935\Documen	ts\New Fold	m/covic	ure mini projec.es	ie				
ti de la contra								
******								
	0000	111111	II Search Pa	tients Record !				
Enter Patient Name to	he view	and rishes	redult.					
		200						
Full Name			Address	Contact No.			mPrescribed Doctor	
Shardul Shinde	М	21	Kolhapur	1234567890	shardul@gmail.com	Fever	Asd	
	Do you	want	to view more	[Y/N]??N				
Thorn								
1040	( you :)	:)						

5)

				ME HOSPITAL				
	11111	******	II List Pat	ients Record !!				
11 Name	Gender		Address	Contact No.	Email	Problem	Prescribed Doctor	
ardul Shinde		21	Kolhapur	1234567898	shardul@gmail.com	Fever	Asd	
tndeep KAmble	H	21	Ko1hapur	1234567890	ratndeep@gmail.com	Fever	Abed	

```
COVICAGE HOSPITAL

IIIIIIIIIII Vaccination SystemIIIIIIIIII

Name Of Candidate: shandul

Age:21

Gender[F/M]: M

Date of Vaccination (66/mm/yy): 21/87/21

Choose Vaccine from Follow:

1. Covexin

2. Cevishield

3. Sputnik

Choose from 1 to 3:2

Registration successful for Covishield

... Information Record Successful ...
```

RESULT: Covid Hospital Management System Successfully Completed"