Guru Harkrishan Public School

Computer Science(083) Project

Topic: **COVID-19 Management System**

Guided By:- **Sukhdev Nayyar**

Submitted By: **Aniket Gauba**

Class: **XII**

Roll Number:

ACKNOWLEDGEMENT

At the outset, I express our gratitude to the Almighty Lord for the divine guidance and wisdom showered on me to undertake this project.

I am immensely grateful to my beloved Principal for his involvement in this project by providing useful inputs and timely suggestions.

I am also thankful to my Computer Science teacher for his guidance and help to make this project a success.

My Parents also played a key role in shaping up this project nicely and I convey my special thanks to them as well.

CERTIFICATE

This is to certify that Aniket Gauba Roll No. …….. Of class XII of **GURU HARKRISHAN PUBLIC SCHOOL** has successfully completed his/her project report in computer science on the topic **"COVID-19 MANAGEMENT SYSTEM"** for the partial fulfillment of **AISSCE** as prescribed by the **CBSE** in the year **2021-2022.**

Internal Examiner   External Examiner

INDEX

SYSTEM REQUIREMENTS

HARDWARE REQUIREMENT:

- *Printer-to print the required documents of the project.*
- *Compact Drive*
- *Processor: Pentium III and above*
- *RAM: 256MB(minimum)*
- *Hard-Disk: 20GB(minimum)*

SOFTWARE REQUIREMENTS:

- *Windows 7 or higher*
- *My SQL server 5.5 or higher*
- *Python IDLE 3.7 or higher*
- *Microsoft Word for documentation*

INTRODUCTION TO PYTHON

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

INTRODUCTION TO PROJECT

The COVID-19 Management System software is a software used by common man and hospitals for management. This software stores the details of patients and staffs dealing with COVID-19 and helps us to make record of them this system uses to store the data and check the records to maintain an efficient data for future reference and help scientists and doctors to study how covid is impacting.

OBJECTIVE OF PROJECT

The objective of the project is to develop the functions of hospitals. This software project is also aimed to enhance record keeping system which will help managers to retrieve the up-to-date information at right time in right shape. Also, to prevent, detect and respond to the threat posed by covid-19 and to strengthen national health systems for preparedness in India.

LIMITATIONS

➢ *The project has no provision to record vaccinated people.*

➢ *It doesn't have record that how many beds are left in Hospitals.*

➢ *It doesn't have any provision that which supplies are needed by the hospitals.*

SORCE CODE:

Source Code For COVID-19 Management

```python
print("*************************************************")

print("*                                               *")
print("*        Welcome to COVID Management System*")
print("*                                               *")
print("*************************************************")

import mysql.connector

mydb=mysql.connector.connect(host="localhost",
user="root" , passwd='1234')

mycursor=mydb.cursor()

mycursor.execute('create database if not exists
covid_management')

mycursor.execute('use covid_management')

mycursor.execute('create table if not exists staff(sno
varchar(25)not null, name varchar(25) not null,age
varchar(25) not null, gender char(1) not null , post
varchar(25) not null , salary varchar(25) not null)')
```

```python
mycursor.execute('create table if not exists patients(sno
varchar(25)not null, name varchar(25) not null, age
varchar(25) not null, gender char(1) not null , date date
not null)')

mycursor.execute('create table if not exists login(admin
varchar(25)not null, password varchar(25) not null)')

mycursor.execute('create table if not exists sno(patient
varchar(25)not null, staff varchar(25) not null)')

mycursor.execute('select * from sno')

z=0

for i in mycursor:

    z=1

if z==0:

    mycursor.execute(" insert into sno values('0' , '0')")

mydb.commit()

j=0

mycursor.execute("select * from login")
```

```python
for i in mycursor:
    j=1
if(j==0):
    mycursor.execute("insert into login
values('Admin','ab')")
    mydb.commit()
loop1='y'
while(loop1=='y' or loop1=='Y'):
    print("_____")
    print("1.Admin")
    print("2.Patient")
    print("3.Exit")
    print("_____")
    ch1=int(input("Enter your choice:"))
    if(ch1==1):
        pas=input("Enter your password:")
        mycursor.execute("select * from login")
        for i in mycursor:
            username,password=i
```

```python
if(pas==password):
    loop2='n'
    while(loop2=='n' or loop2=="N"):
        print("_____")
        print("1.Add patients")
        print("2.Add staff")
        print("3.Display Patients Record")
        print("4.Display Staff Record")
        print("5.Change Password")
        print("6.Remove Patients")
        print("7.Remove Staff")
        print("8.Logout")
        print("_____")
        ch2=int(input("Enter your choice:"))
        if(ch2==1):
            loop3='y'
            while(loop3=='y'or loop3=="Y"):
                name=input("Enter patients name:")
                age=input("enter Patients age:")
                gender=input("Enter patients gender:")
```

```python
            date=input("Enter date of conformation:")
            mycursor.execute("select * from
sno")#[(),()]

            for i in mycursor:
                patient,staff=i
                patient=int(patient)+1
            mycursor.execute("insert into patients
values('"+str(patient)+"','"+name+"','"+age+"','"+gender+"
','"+date+"')")


            mycursor.execute("update sno set
patient='"+str(patient)+"'")
            mydb.commit()
            print("data of Patient has saved
successfully...")
            mycursor.execute("select * from
patients")

            t=0
            for i in mycursor:
                t+=1
                t_id1,name1,age1,gender1,date1=i
```

```python
            print(f"Total number of Corona Infected
patients----> {patient}")
                print(f"Active Corona Cases---> {t}")
                print(f"This patient with id (t_idl) will be
in quarantine upto 14 days from {date}")
                loop3=input("Do you want to enter more
data of more patients(y/n):")
            loop2=input("Do you want to Logout (y/n):")
        elif(ch2==2):
            loop3="y"
            while(loop3=="y" or loop3=="Y"):
                name=input('Enter New Staff Name:')
                age=input("Enter Age:")
                gender=input("Enter genedr(m/f):")
                post=input("Enter his/her post:")
                salary=input("Enter his/her Salary:")
                mycursor.execute("select * from sno")
                for i in mycursor:
                    patient,staff=i
                    staff=int(staff)+1
```

```python
                mycursor.execute("insert into staff
values('"+str(staff)+"','"+name+"','"+age+"','"+gender+"','
"+post+"','"+salary+"')")
                mycursor.execute("update sno set
staff='"+str(staff)+"'")
                mydb.commit()
                print(f"staff with id {staff} has been saved
successfully...")
                mycursor.execute('select * from staff')
                t=0
                for i in mycursor:
                    t+=1
                print(f"Active Staff Members--->{t}")
                loop3=input("Do you want to enter more
staff dta(y/n):")
            loop2=input("Do you want to logoutt(y/n):")
        elif(ch2==3):
            idd=input("Enter patient's ID:")

t_id2,name2,age2,gender2,date2=["","","","",""]
```

```python
                mycursor.execute("select * from patients
where sno ='"+idd+"'")
                for i in mycursor:
                    t_id2,name2,age2,gender2,date2=i
                print("| ID | NAME | AGE | GENDER |
CORONA POSITIVE DATE |")
                print(f"| {t_id2} | {name2} | {age2} |
{gender2} | {date2} |")
            elif(ch2==4):
                idd=input("Enter Staff ID:")

t_id3,name3,age3,gender3,post3,salary3=["","","","","",""
]
                mycursor.execute("select * from staff where
sno='"+idd+"'")
                for i in mycursor:
                    t_id3,name3,age3,gender3,post3,salary3=i
                print("| ID | NAME | AGE | GENDER |
POST | SALARY |")
                print(f"| {t_id3} |{name3} | {age3} |
{gender3} | {post3} | {salary3} |")
```

```python
        elif(ch2==5):
            pas=input("Enter Old Password:")
            mycursor.execute("select * from login")
            for i in mycursor:
                username,password=i
            if(pas==password):
                npas=input("Enter New Password:")
                mycursor.execute("update login set
password='"+npas+"'")
                mydb.commit()
            else:
                print("Wrong Pasword...")
        elif(ch2==6):
            loop3='y'
            while(loop3=='y' or loop3=="Y"):
                idd=input("Enter Patient ID:")
                mycursor.execute("delete from patients
where sno='"+idd+"'")
                mydb.commit()
```

```python
            print("Staff has been removed successfully")
                loop3=input("Do You Want to Remove More Patient(y/n):")
        elif(ch2==7):
            loop3='y'
            while(loop3=='y' or loop3=="Y"):
                idd=input("Enter Staff ID:")

                mycursor.execute("delete from Staff where sno='"+idd+"'")
                mydb.commit()
                print("Staff has been removed successfully")
                loop3=input("Do You Want to RemoveMore Staff(y/n):")
        elif(ch2==8):
            break
```

```python
    elif(ch1==2):
        print("Thank you for coming forward for your
test....")
        icough=input("are you Feeling
cough?(y/n):").lower()
        dry_cough='n'
        cough='n'
        if(icough=='y' or icough=='Y'):
            dry_cough=input("Are you eeling dry
cough(y/n):").lower()
            cough=input("Are you feeling normal
cough(y/n):").lower()
        sneeze=input("Are You feeling
Sneeze?(y/n):").lower()
        pain=input("Are you feeling pain in your
body?(y/n)").lower()
        weakness=input("Are you feeling
weakness?(y/n):").lower()
        mucus=input("Are you feeling
mucus?(y/n):").lower()
        itemp=int(input("Please Enter your temperature:"))
```

```python
    if(itemp<=100):
        temp='low'
    else:
        temp='high'
    breath=input("Are you having difficulty in breathing(y/n):").lower()
    if(dry_cough=='y' and sneeze=='y' and pain=='y' and weakness=='y'  and temp=='high' and breath=='y'):
        print('Sorry to say but According to us u are suffering from Corona.......')
        name=input("Enter your name:")
        age=input("Enter your age:")
        gender=input("Enter your gender(m/f):")
        mycursor.execute("select * from sno")
        for i in mycursor:
            patient,staff=i
            patient=int(patient)+1
        mycursor.execute("insert into patients values('"+str(patient)+"', '"+name+"','"+age+"','"+gender+"', now())")
```

```python
        mycursor.execute("update sno set
patient='"+str(patient)+"'")

        mydb.commit()

        print('data of patient been saved successfully....')

        print(f"Total number of Corona Infected patients--
-->{patient}")

        mycursor.execute("select * from patients")

        t=0

        for i in mycursor:

            t+=1

        print(f"Active Corona Cases-->{t}")

        mycursor.execute("select * from patients")

        for i in mycursor:

            t_id5,name5,age5,gender5,date5=i

        print(f"This patien with id {t_id5} will be in
quarantine upto 14 days from {date5}")

    elif(dry_cough=='y' and sneeze=='y' and pain=='n'
and weakness=='n'  and temp=='low' and breath=='n'):

        print("Nothing to worry its just due to Air
pollution...")
```

```python
    elif(cough=='y' and mucus=='y' and sneeze=='y' and
pain=='n' and weakness=='n'  and temp=='low' and
breath=='n'):
        print("Nothing to worry its just Common Cold...")
    else:
        print("You are not corona infected, if you are
feeling something wrong please consult to your doctor.")
    elif(ch1==3):
        break
```

OUTPUT:

```
mysql> select * from login;
+---------+-----------+
| admin   | password  |
+---------+-----------+
| Admin   | aa        |
+---------+-----------+

mysql> select * from sno;
+-----------+---------+
| patient   | staff   |
+-----------+---------+
| 13        | 9       |
+-----------+---------+
```

```
+------+----------+------+--------+------------+
| sno  | name     | age  | gender | date       |
+------+----------+------+--------+------------+
| 4    | aniket   | 17   | m      | 2020-11-11 |
| 5    | lokesh   | 35   | m      | 2021-08-30 |
| 9    | titiksha | 18   | f      | 2021-04-20 |
| 10   | Ansh     | 12   | m      | 2021-07-09 |
| 11   | Kamlesh  | 65   | f      | 2020-09-25 |
| 12   | Anshu    | 53   | f      | 2021-05-14 |
+------+----------+------+--------+------------+
```

```
mysql> select * from staff;
+-----+-----------+-----+--------+-------------------+--------+
| sno | name      | age | gender | post              | salary |
+-----+-----------+-----+--------+-------------------+--------+
| 5   | Aniket    | 30  | m      | Doctor            | 100000 |
| 6   | Baljeet   | 25  | m      | Assistance Doctor | 30000  |
| 7   | Anshika   | 35  | f      | Nuse              | 10000  |
| 8   | Sarabjeet | 30  | m      | Senior Doctor     | 150000 |
| 9   | Parul     | 40  | f      | Receptionist      | 11000  |
+-----+-----------+-----+--------+-------------------+--------+
```

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\admin\OneDrive\Desktop\Computer Science Project\Covid - 19 Management.py
*********************************************************
*                                                       *
*        Welcome to COVID Management System*
*                                                       *
*********************************************************


_____
1.Admin
2.Patient
3.Exit
_____

Enter your choice:
```

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\admin\OneDrive\Desktop\Computer Science Project\Covid - 19 Management.py
*********************************************************
*                                                       *
*        Welcome to COVID Management System*
*                                                       *
*********************************************************


_____
1.Admin
2.Patient
3.Exit
_____

Enter your choice:1
Enter your password:aa
_____
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout
_____

Enter your choice:
```

```
_____
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout
_____
Enter your choice:1
Enter patients name:Anant
Enter Patients age:10
Enter patients gender:m
Enter date of conformation:2021-05-18
Data of Patient has saved successfully...
Total number of Corona Infected patients----> 14
Active Corona Cases---> 7
This patient will be in quarantine upto 14 days from 2021-05-18
Do you want to enter more data of more patients(y/n):n
Do you want to Logout (y/n):n
```

```
mysql> select * from patients;
+------+----------+-----+--------+------------+
| sno  | name     | age | gender | date       |
+------+----------+-----+--------+------------+
|  4   | aniket   | 17  | m      | 2020-11-11 |
|  5   | lokesh   | 35  | m      | 2021-08-30 |
|  9   | titiksha | 18  | f      | 2021-04-20 |
| 10   | Ansh     | 12  | m      | 2021-07-09 |
| 11   | Kamlesh  | 65  | f      | 2020-09-25 |
| 12   | Anshu    | 53  | f      | 2021-05-14 |
| 14   | Anant    | 10  | m      | 2021-05-18 |
+------+----------+-----+--------+------------+
```

```
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout

Enter your choice:2
Enter New Staff Name:Anuj
Enter Age:45
Enter genedr(m/f):m
Enter his/her post:Doctor
Enter his/her Salary:50000
staff with id 10 has been saved successfully...
Active Staff Members--->6
Do you want to enter more staff dta(y/n):n
Do you want to Logout(y/n):n
```

```
mysql> select * from staff;
+------+----------+-----+--------+-------------------+--------+
| sno  | name     | age | gender | post              | salary |
+------+----------+-----+--------+-------------------+--------+
| 5    | Aniket   | 30  | m      | Doctor            | 100000 |
| 6    | Baljeet  | 25  | m      | Assistance Doctor | 30000  |
| 7    | Anshika  | 35  | f      | Nuse              | 10000  |
| 8    | Sarabjeet| 30  | m      | Senior Doctor     | 150000 |
| 9    | Parul    | 40  | f      | Receptionist      | 11000  |
| 10   | Anuj     | 45  | m      | Doctor            | 50000  |
+------+----------+-----+--------+-------------------+--------+
```

```
_____
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout
_____
Enter your choice:3
Enter patient's ID:14
| ID | NAME | AGE | GENDER | CORONA POSITIVE DATE |
| 14 | Anant | 10 | m | 2021-05-18 |
```

```
_____
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout
_____
Enter your choice:4
Enter Staff ID:10
| ID | NAME | AGE | GENDER | POST | SALARY |
| 10 |Anuj | 45 | m | Doctor | 50000 |
```

```
_____
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout
_____
Enter your choice:5
Enter Old Password:aa
Enter New Password:ag
```

```
_____
1.Admin
2.Patient
3.Exit
_____
Enter your choice:1
Enter your password:ag
_____
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout
_____
Enter your choice:
```

```
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout

Enter your choice:6
Enter Patient ID:14
Patient has been removed successfully
Do You Want to Remove More Patient(y/n):n
```

```
mysql> select * from patients;
+------+----------+------+--------+------------+
| sno  | name     | age  | gender | date       |
+------+----------+------+--------+------------+
|  4   | aniket   | 17   | m      | 2020-11-11 |
|  5   | lokesh   | 35   | m      | 2021-08-30 |
|  9   | titiksha | 18   | f      | 2021-04-20 |
| 10   | Ansh     | 12   | m      | 2021-07-09 |
| 11   | Kamlesh  | 65   | f      | 2020-09-25 |
| 12   | Anshu    | 53   | f      | 2021-05-14 |
+------+----------+------+--------+------------+
```

```
_____
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout

_____
Enter your choice:7
Enter Staff ID:10
Staff has been removed successfully
Do You Want to Remove More Staff(y/n):n
```

```
mysql> select * from staff;
+-----+----------+-----+--------+-------------------+--------+
| sno | name     | age | gender | post              | salary |
+-----+----------+-----+--------+-------------------+--------+
| 5   | Aniket   | 30  | m      | Doctor            | 100000 |
| 6   | Baljeet  | 25  | m      | Assistance Doctor | 30000  |
| 7   | Anshika  | 35  | f      | Nuse              | 10000  |
| 8   | Sarabjeet| 30  | m      | Senior Doctor     | 150000 |
| 9   | Parul    | 40  | f      | Receptionist      | 11000  |
+-----+----------+-----+--------+-------------------+--------+
```

```
 _____
1.Add patients
2.Add staff
3.Display Patients Record
4.Display Staff Record
5.Change Password
6.Remove Patients
7.Remove Staff
8.Logout
 _____

Enter your choice:8

 _____
1.Admin
2.Patient
3.Exit

 _____
Enter your choice:
```

```
 _____
Enter your choice:2
Thank you for coming forward for your test....
are you Feeling cough?(y/n):y
Are you eeling dry cough(y/n):y
Are you feeling normal cough(y/n):y
Are You feeling Sneeze?(y/n):y
Are you feeling pain in your body?(y/n)y
Are you feeling weakness?(y/n):y
Are you feeling mucus?(y/n):y
Please Enter your temperature:102
Are you having difficulty in breathing(y/n):y
Sorry to say but According to us u are suffering from Corona.......
Enter your name:Seema
Enter your age:40
Enter your gender(m/f):f
data of patient been saved successfully....
Total number of Corona Infected patients--->15
Active Corona Cases-->7
This patien with id 15 will be in quarantine upto 14 days from 2021-08-30
```

```
mysql> select * from patients;
+------+----------+------+--------+------------+
| sno  | name     | age  | gender | date       |
+------+----------+------+--------+------------+
| 4    | aniket   | 17   | m      | 2020-11-11 |
| 5    | lokesh   | 35   | m      | 2021-08-30 |
| 9    | titiksha | 18   | f      | 2021-04-20 |
| 10   | Ansh     | 12   | m      | 2021-07-09 |
| 11   | Kamlesh  | 65   | f      | 2020-09-25 |
| 12   | Anshu    | 53   | f      | 2021-05-14 |
| 15   | Seema    | 40   | f      | 2021-08-30 |
+------+----------+------+--------+------------+
7 rows in set (0.00 sec)
```

```
_____
1.Admin
2.Patient
3.Exit

_____
Enter your choice:2
Thank you for coming forward for your test....
are you Feeling cough?(y/n):y
Are you eeling dry cough(y/n):y
Are you feeling normal cough(y/n):n
Are You feeling Sneeze?(y/n):y
Are you feeling pain in your body?(y/n)n
Are you feeling weakness?(y/n):n
Are you feeling mucus?(y/n):n
Please Enter your temperature:98
Are you having difficulty in breathing(y/n):n
Nothing to worry its just due to Air pollution...
```

```
_____
1.Admin
2.Patient
3.Exit
_____
Enter your choice:2
Thank you for coming forward for your test....
are you Feeling cough?(y/n):y
Are you eeling dry cough(y/n):n
Are you feeling normal cough(y/n):y
Are You feeling Sneeze?(y/n):y
Are you feeling pain in your body?(y/n)n
Are you feeling weakness?(y/n):n
Are you feeling mucus?(y/n):y
Please Enter your temperature:98
Are you having difficulty in breathing(y/n):n
Nothing to worry its just Common Cold...
```

```
_____
Enter your choice:2
Thank you for coming forward for your test....
are you Feeling cough?(y/n):y
Are you eeling dry cough(y/n):y
Are you feeling normal cough(y/n):y
Are You feeling Sneeze?(y/n):y
Are you feeling pain in your body?(y/n)n
Are you feeling weakness?(y/n):y
Are you feeling mucus?(y/n):n
Please Enter your temperature:100
Are you having difficulty in breathing(y/n):n
You are not corona infected, if you are feeling something wrong please consult to your doctor.
```

BIBLIOGRAPHY

Books:

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- ✓ *Computer Science with Python- By Sumita Arora*

- ✓ *Learning with Python-By Allen Downey*