COVID MANAGEMENT PROJECT

COMPUTER SCIENCE

CLASS- 12TH

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A Project Report Submitted in Partial Fulfillment of the Requirements.

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TO:

[PGT COMPUTER SCIENCE]

Contents

Introduction

The main aim of science technology is to understand natural events and help the people to cope up with them at ease. As we all are facing covid 19 pandemic in recent time, all the important works are become slow or shut off. In this situation there is a lot of need of covid management system to the health authority. So I have done a small project work on "COVID MANAGEMENT SYSTEM".

OBJECTIVE

The main objective of this project is to computerize the maintenance of covid patient's details, staff details and how many active covid patients are there. This project includes management of covid patients and staff in the hospital and to check whether a person is affected or not.

SCOPE AND SIGNIFICANCE

The main features of this project are:

1) **To reduce paperwork**
2) **To reduce time and increase efficiency**
3) **Increase accuracy and reliability of the data management**
4) **Data security**
5) **Environment friendly**

This project is used by two types of

users:

#Patient
#Health authority

By using this project work one can do the following:

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**

DATASET

- **Symptoms of covid 19 virus**
- **Details of recent covid affected patients in the hospital.**
- **Details of staff members**
- **Password for data security**
- **Patient's personal details .**

System Requirements of the Project

Recommended System Requirements

Processors: Intel® Core™ i3 processor 4300M at 2.60 GHz. Disk space: 2 to 4 GB.

Operating systems: Windows® 10, MACOS, and UBUNTU. Python Versions: 3.X.X or Higher.

Minimum System Requirements

Processors: Intel Atom® processor or Intel® Core™ i3 processor.

Disk space: 1 GB.

Operating systems: Windows 7 or later, MACOS, and UBUNTU.

Python Versions: 2.7.X, 3.6.X.

Prerequisites before installing MySQL Connector Python

You need root or administrator privileges to perform the installation process.

Python must be installed on your machine.

Note: – MySQL Connector Python requires python to be in the system's PATH. Installation fails if it doesn't find Python.

On Windows, If Python doesn't exist in the system's PATH, please manually add the directory containing python.exe yourself.

The Hardware used

While developing the system, the used hardware-are

PC with Pentium Dual Core processor having 2.00 GB RAM'SVGA and other required

devices.

The Software used

Microsoft Windows10 as Operating System.

Python 3.7 as Front-end-Development environment.

MYSQL as Back-end Sever with Database for Testing

MS-Word 2022 for documentation.

Python Coding

```
print ("**************************************************")
print ("******Welcome to Covid Management System**********")
print("**************************************************")

import mysql.connector
mydb=mysql.connector.connect (host='localhost',
                              database='covid_management',
                              user='root',
                              password='XXXXXXX')
mycursor.execute ("use covid_management")
mycursor.execute ("create table if not exist 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); ")
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,
post varchar(25) not null, salary varchar(25 ) 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;")

for i in mycursor:
  j=1
if (j==0):
mycursor.execute ("insert into login values ('Admin',' ng'); ")
mydb.commit()
loop1='y'
while(loopl=='y' or loop1=='Y') :
   print (".....................")
   print ("1.Admin")
   print ("2.Patient")
   print ("3.Exit")
   print (".....................")
chl=int(input("Enter your choice: "))
   if(chl==1):
     pas=input("Enter your Password: ")
mycursor.execute ("select from login")
      for i in mycursor:
        username, password-i
      if (pas==password):
        loop2='n'
        while (loop2-'n' or loop2=='N'):
           print ("_____________________________")
           print ("1.Add patients")
           print ("2.Add staff")
           print ("3.Diaplay 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'
            I while (loop3=='y' or loop3=='Y'):
               name input ("Enter patients name: ")
               age-input ("Enter patients age: ")
               gender=input ("Enter patients gender: ")
```

```
                date-input ("Enter date of conformation of covid: ")
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 been saved successfully...")
mycursor.execute("select * from patients")
                t=0
                for i in mycursor:
                  t+=1
t_idl, namel, agel, genderl, datel=i
                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 {datel}")

                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 gender (m/£) : ")
                    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

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 Data (y/n) :")
                loop2=input ("Do You Want To Logout (y/n): ")
elif(ch2==3):
idd=input("Enter patient's ID: ")
                  t_id2,name2,age2,gender2,date2=["","","","",""]
mycursor.execute ("select * from patients where sno='"+idd+"'")
                  for i in mycursor:
                    t_id2,name2,age2,gender2,date2=i
print("| IDI NAME | AGE I 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,past3,salary3=["","","","","",""]
mydb.commit ()
mycursor.execute("select * from staff where sno="+idd+"")
                  for i in mycursor:
                    t_id3,name3,age3,gender3,past3,salary3-i
                    print ("| ID | NAME AGE | GENDER I POST I SALARY |")
                    print (f"| (t_id3} I (name3} I {age3) I (gender3) 1 (past3)I {salary3} |")
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 Password...")
elif (ch2==6):
                  Lod3='y'
                  while (loop3=='y' or loop3=='Y'):
idd=input("Enter Patient ID")
mycursor.execute("delete from patients where sno="+idd+"")
mydb.commit()
```

```
print("Patient has been removed successfully")
                loop3=input("Do You Want To Remove More Patients (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 Remove More staff (y/n): ")
elif(ch2==8:
              break
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 feeling 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): ").1ower()
            mucus=input("Are You feeling any mucus (y/n) ").1ower()
itemp=int(input ("please Enter your temprature: "))
            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 you 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
```

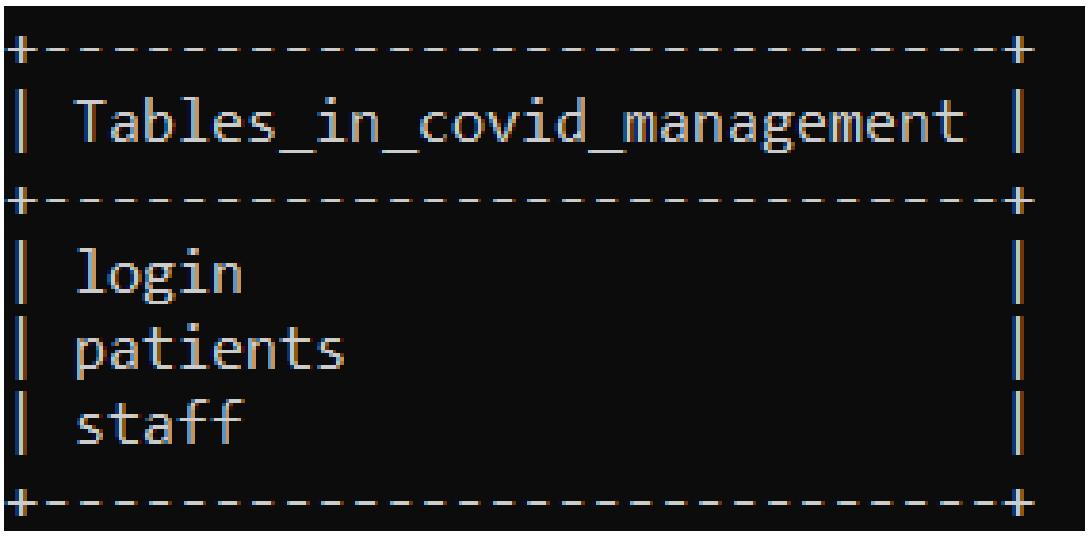
```
mycursor.execute("insert into patients values("+str(patient) +"
"+name+"'","+age+","+gender+"', now()) ")
mycursor.execute ("update sno set patient="+str(patient) +"")
mydb.commit ()
            print ("data of Patient has been saved successfully...")
            print (f"Total number of Corona Infected 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=1
            print (f"This patient with id (t_id5) will be in quarantine upto l4 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, it's just due to Air Pollution...")

elif(cough=='y' and mucus=='y' and sneeze=='y' and pain=='n' and weakness=='n'
and temp=='low' and breath=3'n'):
            print ("nothing to worry, it's just Common Cold...")
          else:
            print ("You are not corona infected, if u are feeling something wrong, you
just need to rest... ")
            print ("If then also you can't feel better, please consult to your doctor.")
elif(ch1==3):
          break
```

MYSQL DATABASE AND TABLES USED IN THIS PROJECT

An important aspect of system design is the design of data storage structure. To begin with a logical model of data structure is developed first. A database is a container object which contains tables,queries, reports and data validation policies enforcement rules or constraints etc. A logical data often
represented as records are kept in different tables after reducing anomalies and redundancies. The goodness of data-base design lies in the table structure and its relationship.This software project maintains a database named covid_management which contains the following tables.



Field	Type	Null	Key	Default	Extra
sno	varchar(25)	NO		NULL	
name	varchar(25)	NO		NULL	
age	varchar(25)	NO		NULL	
gender	char(1)	NO		NULL	
post	varchar(25)	NO		NULL	
salary	varchar(25)	NO		NULL	

Field	Type	Null	Key	Default	Extra
sno	varchar(25)	NO		NULL	
name	varchar(25)	NO		NULL	
age	varchar(25)	NO		NULL	
gender	char(1)	NO		NULL	
Date	date	NO		NULL	

Field	Type	Null	Key	Default	Extra
admin	varchar(25)	NO		NULL	
password	varchar(25)	NO		NULL	

Output of the Project

Finally, we conclude our work and present the output of the Project.

MAIN SCREEN

```
>>>
============== RESTART: E:\NG\projects\Covid Management System.py ==============
********************************************************************************
*                                                                              *
*             Welcome to Covid Management System              *
*                                                                              *
********************************************************************************

_____________________
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 feeling 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 any mucus(y/n)y
please Enter your temprature: 102
Are you having difficulty in breathing: y
Sorry To Say But According to us u are suffering from Corona.......
Enter your name: ng
Enter your age: 18
Enter your gender(m/f): m
data of Patient has been saved successfully...
Total number of Corona Infected patients--> 2
Active Corona Cases--> 1
This patient with id 2 will be in quarantine upto 14 days from 2020-11-10

_____________________
1.Admin
2.Patient
3.Exit

_____________________
Enter your choice:
```

```
_____
Enter your choice: 1
Enter your Password: ng

_____
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: nishant
Enter patients age: 7
Enter patients gender: m
Enter date of conformation of covid: 20201110
data of Patient has been saved successfully...
Total number of Corona Infected patients--> 3
Active Corona Cases--> 2
This patient with id 3 will be in quarantine upto 14 days from 2020-11-10
Do You Want To Enter More Data Of More Patients(y/n): n
Do You Want To Logout(y/n): n

_____
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
```

```
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 ID3
Patient has been removed successfully
Do You Want To Remove More Patients(y/n): n

_____________________________
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 ID1
Staff has been removed successfully
Do You Want To Remove More Staff(y/n): n

_____________________________
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: 1
| ID | NAME | AGE | GENDER | POST | SALARY |
| 1 | nishant | 50 | m | doctor | 20000 |

_____________________________
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: ng
Enter New Password: ngl

_____________________________
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: 1
Enter your Password: ngl
```