

1. INTRODUCTION

1.1 PROJECT OVERVIEW

BAHBAI HOSPITAL MANAGEMENT SYSTEM (BHMS) was introduced with the cause for helping hospitals speed up their processes. It is a system for managing the hospital functions and events. It has different modules such as adding new doctors, managing patients and managing appointments. It is web-based powerful hospital management containing user, receptions and admin panel. Both the reception and admin panel are secured with receptionist's and admin's password including with their respective user ID's. It is a secure and effective software specifically designed to fulfil various requirement in managing hospitals. BHMS provides the ability to manage all the paperwork in one place. BHMS does many works like:

- Maintain the medical records of the patient
- Maintain the contact details of the patient
- Keep track of the appointment dates
- Save the insurance information for later reference

BHMS not only saves time in the hospital but also is cost-effective in decreasing the number of people working on the system of manual entry of data and paperwork. The implementation of BHMS will decrease the human intervention into the system thereby avoiding human-caused errors. Hospital Management System offers a better-concerted atmosphere between doctors, patients, hospital staff, groups, and managing workflows. The portal solutions are capable of unifying the legal objects, applications from other portals and also manages multitudes of user requests, which results in reckless information flow between patients, doctors, and staff.

2. PYTHON / SQL OVERVIEW

Python is a high-level, interpreted, and general-purpose dynamic programming language that focuses on code readability. It has fewer steps when compared to Java and C. It was founded in 1991 by developer Guido Van Rossum. Python ranks among the most popular and fastest-growing languages in the world. Python is a powerful, flexible, and easy-to-use language. In addition, the community is very active there. It is used in many organizations as it supports multiple programming paradigms. It also performs automatic memory management.

- Presence of third-party modules
- Extensive support libraries
- Open source and community development
- Versatile, Easy to read, learn and write
- User-friendly data structures
- High-level language
- Dynamically typed language(No need to mention data type based on the value assigned, it takes data type)
- Object-oriented language

MySQL is an open-source relational database management system (RDBMS). It is the most popular database system used with PHP.

MySQL is developed, distributed, and supported by Oracle Corporation.

- The data in a MySQL database are stored in tables which consists of columns and rows.
- MySQL is a database system that runs on a server.
- MySQL is ideal for both small and large applications.
- MySQL is very fast, reliable, and easy to use database system. It uses standard SQL
- MySQL compiles on a number of platforms.

3. SYSTEM ANALYSIS

3.1. EXISTING SYSTEM.

Managing a hospital is not much easy, and there are chances for some mistakes to occur. A manual system can ensure 100% accurate processing and fool proof. There are higher chances for mistakes and errors in this case. Also many of the patients are unable to visit the hospital due to transportation issues beside this the patients have to stand in queues for hours to get an appointment. Most of the public are unaware of the rulings which are to be followed in the hospital. Several errors are made by the employees during the peak hours due to the pressure of the patients.

3.2. PROPOSED SYSTEM.

BHMS makes it possible to access all the data related to a patient via a system by the means of a few simple clicks. Information like patient history, doctors involved and many more can be made visible to the user. These data will help to connect the dots about the patient, like specific diagnosis, related treatment, and medication. BHMS was introduced to solve the complications coming from managing all the paper works of every patient associated with the various departments of hospitalization with confidentiality. HMS provides the ability to manage all the paperwork in one place, reducing the work of staff in arranging and analysing the paperwork of the patients.

4. SYSTEM REQUIREMENTS

4.1. SOFTWARE REQUIREMENTS.

- Operating system : Windows 10 (recommended)
- Platform : Python
- Version : 2.7.X or 3.6.X(recommended)
- Database : MySQL
- Language : Python

4.2 HARDWARE REQUIREMENTS.

- Processor : Intel core i3 processor 4300 at 2.6 GHz
- Hard Disk : 4 GB (recommended)
- RAM : 4 GB or 8 GB(recommended)

PREREQUISITE BEFORE INSTALLING MYSQL CONNECTOR PYTHON:

You need root or administration privileges to perform the installation process. Python must be installed into your machine.

NOTE: MySQL connector python requires python to be in the system's path. Installation fails if it does not find the path.

On windows, if python doesn't exist in the system's path, please manually add the directory containing python.exe yourself.

5. *MODULES AND FUNCTIONS*

MODULES:

- Mysql.connector

FUNCTIONS:

- ***patient_inputs()*** : This function takes the input details of patient and stores it in the database in the table 'PATIENT'.
- ***doctor_inputs()*** : This function takes the input details of doctor and stores it in the database in the table 'DOCTOR'.
- ***admin()*** : This function provides sign up method for new admin with the authority of an existing admin_id.
- ***reception()*** : This function provides sign up method for new receptionist with the help of an admin_id.
- ***update_patient()*** : This function updates the records of a patient if the patient_ID is provided to it.
- ***doctor_update()*** : This function updates the records of a doctor if the doctor_ID is provided to it.
- ***delete_p_records()*** : This function deletes a patients records if the patient_ID is provided to it.
- ***delete_d_records()*** : This function deletes a doctors records if thr doctor_ID is provided to it.
- ***appointment()*** : This function allow user's to take an appointment with the doctors of their choice.
- ***search_patient()*** : This function helps in searching for a patient with any detail of the patient.

- ***search_doctor()*** : This function helps in searching for a doctor with any detail of the doctor.
- ***show_messages()*** : This function allows the admin to see the reviews and suggestions a patient has regarding the hospital.
- ***admin_log_in()*** : This function is the admin panel. It contains other functions which can manage the whole Bahbai hospital after logging in with the admin_id and password.
- ***reception_log_in()*** : This function is the reception panel. It contains other functions which are used to manipulate patient data and appointments.
- ***search()*** : This function contains the methods for searching patients and doctors. It uses other two functions like search_patient() and search_doctor().
- ***contact_us()*** : This function helps user to contact us by writing a message which is stored in the database.
- ***help_me()*** : This function provides the major information about the functionality of the Bahbai hospital management system.
- ***display_patient()*** : This function displays all the patients and their information. This function is not available to the normal user's.
- ***display_doctor()*** : This function displays all the doctors and their information. This function is not available to normal user's.
- ***owner()*** : This function is a private function which cant be seen in the whole program hen running it. The purpose of this function that if the admin forgets the admin_id or password, then it can be recovered by typing '2003' in the beginning of the program.

6. *SYSTEM DEVELOPMENT*

6.1. SOURCE CODE.

```
#importing mysql.connector
import mysql.connector

#asking password from user to access MySQL
pas=input("ENTER YOUR MYSQL PASSWORD : ")

#connecting with mysql
con=mysql.connector.connect(host='localhost',
                             password=pas,
                             user='root')

#checking if the connection is established
if con.is_connected():
    print("\n connecting...")
    print('connection successful')

cur=con.cursor()
cur.execute("SHOW DATABASES")
```

```
#checking if the database 'hospital' exists or not
g=()
for i in cur:
    g=g+i
g1=list(g)
count=0
for i in g1:
    if 'hospital' in g1:
        count=count+1
        break
    else:
        count=count+0
#creating new database 'hospital' if it does not exists

if count==0:
    print("\n DATABASE DOES NOT EXIST")
    cur.execute("create database hospital")
    con.commit()
    cur.execute("use hospital")
    con.commit()
    cur.execute("create table patient (p_id int primary key,name
varchar(20),gender varchar(10),age int,address varchar(20),contact
int,email varchar(30),room int,bed int)")
    con.commit()
    cur.execute("create table doctor (d_id int primary key,name
varchar(20),speciality varchar(20),gender varchar(10),age int,salary
int,contact int,email varchar(30),room int)")
    con.commit()
```



```

cur.execute("create table appointment (p_id int primary
key,appointment_with_doctor varchar(30),name varchar(20),gender
varchar(10),age int,address varchar(20),contact int,email
varchar(30),room int,bed int)")

con.commit()

cur.execute("create table admin (user_id int primary key, password
varchar(30),admin_authorisation varchar(20))")

con.commit()

cur.execute("create table reception (user_id int primary key, password
varchar(30),admin_authorisation varchar(20))")

con.commit()

cur.execute("create table messages (user_name varchar(30),contact
int primary key,messages varchar(500))")

con.commit()

cur.execute("insert into admin (user_id,password) values
(1234,'hello1234')")          #default user id and password in admin

con.commit()

cur.execute("insert into reception (user_id,password) values
(12345,'hello12345')")        #default user id and password in reception

con.commit()


print("\n DATABASE CREATED")
else:

cur.execute("use hospital")

con.commit()

cur.execute("SHOW TABLES")

data=cur.fetchall()

#checking if all the tables exists or not

d=()

for i in data:

```

```

    d+=i
check=0
tab=['admin','reception','doctor','patient','appointment','messages']
for i in range(0,len(tab)):
    if tab[i] in d:
        check+=1
    else:
        check+=0
if check!=6:          #if tables does not exist, then creating new
database with new tables
    cur.execute("drop database hospital")
    con.commit()
    cur.execute("create database hospital")
    con.commit()
    cur.execute("use hospital")
    con.commit()
    cur.execute("create table patient (p_id int primary key,name
varchar(20),gender varchar(10),age int,address varchar(20),contact
int,email varchar(30),room int,bed int)")
    con.commit()
    cur.execute("create table doctor (d_id int primary key,name
varchar(20),speciality varchar(20),gender varchar(10),age int,salary
int,contact int,email varchar(30),room int)")
    con.commit()
    cur.execute("create table appointment (p_id int primary
key,appointment_with_doctor varchar(30),name varchar(20),gender
varchar(10),age int,address varchar(20),contact int,email
varchar(30),room int,bed int)")
    con.commit()

```

```

        cur.execute("create table admin (user_id int primary key, password
varchar(30))")
        con.commit()

        cur.execute("create table reception (user_id int primary key,
password varchar(30))")
        con.commit()

        cur.execute("create table messages (user_name
varchar(30),contact int primary key,messages varchar(500))")
        con.commit()

        cur.execute("insert into admin (user_id,password) values
(1234,'hello1234')")
        con.commit()

        cur.execute("insert into reception (user_id,password) values
(12345,'hello12345')")
        con.commit()

        print("\n NEW TABLES CREATED IN DATABASE")

    else:                #if table existing, then we continue with those
tables
        print("\n DATABASE EXIST")

```

#function area

```

def patient_inputs():    #function for patient inputs
    while True:

```

```
while True:
    p_id=input("Patient ID : ")
    a=p_id.isdigit()
    if a==True:
        p_id=int(p_id)
        break
    else:
        print("ERROR! Patient ID must be in NUMBERS")
name=str(input("Patient Name : "))
gender=str(input("Patient Gender : "))
while True:
    age=input("Patient Age : ")
    a=age.isdigit()
    if a==True:
        age=int(age)
        break
    else:
        print("ERROR! Patient AGE must be in NUMBERS")
address=str(input("Patient Address : "))
while True:
    contact=input("Patient Contact : ")
    a=contact.isdigit()
    if a==True:
        contact=int(contact)
        break
    else:
        print("ERROR! Patient CONTACT must be in NUMBERS")
```

```
email=input("Patient Email : ")
while True:
    room=input("Patient Room No. : ")
    a=room.isdigit()
    if a==True:
        room=int(room)
        break
    else:
        print("ERROR! Patient ROOM must be in NUMBERS")
while True:
    bed=input("Patient Bed No. : ")
    a=bed.isdigit()
    if a==True:
        bed=int(bed)
        break
    else:
        print("ERROR! Patient BED must be in NUMBERS")
cur.execute("insert into patient
values(%s,'%s','%s',%s,'%s',%s,'%s',%s,%s)"
%(p_id,name,gender,age,address,contact,email,room,bed))
con.commit()
print("CONGRATULATIONS!!!CHANGES SUCCESSFULLY
SAVED!")
ch=input("DO YOU WANT TO ENTER NEW RECORDS? (Y/N)")
if ch in 'Nn':
    break
else:
    continue
```

```
def doctor_inputs():          #function for doctor input
    while True:
        while True:
            d_id=input("Doctor ID : ")
            a=d_id.isdigit()
            if a==True:
                d_id=int(d_id)
                break
            else:
                print("ERROR! Doctor ID must be in NUMBERS")
        name=str(input("Doctor's Name : "))
        speciality=str(input("Speciality In : "))
        gender=str(input("Gender : "))
        while True:
            age=input("Age : ")
            a=age.isdigit()
            if a==True:
                age=int(age)
                break
            else:
                print("ERROR! Doctor AGE must be in NUMBERS")
        while True:
            salary=input("Salary : ")
            a=salary.isdigit()
            if a==True:
```

```
        salary=int(salary)
        break
    else:
        print("ERROR! Doctor salary must be in NUMBERS")
while True:
    contact=input("Contact : ")
    a=contact.isdigit()
    if a==True:
        contact=int(contact)
        break
    else:
        print("ERROR! Doctor CONTACT must be in NUMBERS")
email=input("Email : ")
while True:
    room=input("Doctor's Room No. : ")
    a=room.isdigit()
    if a==True:
        room=int(room)
        break
    else:
        print("ERROR! Doctor ROOM must be in NUMBERS")
    cur.execute("insert into doctor
values(%s,'%s','%s','%s',%s,%s,%s,'%s','%s')
"%(d_id,name,speciality,gender,age,salary,contact,email,room))
    con.commit()
    print("CHANGES SUCCESSFULLY SAVED!")
    ch=input("DO YOU WANT TO ENTER NEW RECORDS? (Y/N)")
    if ch in 'Nn':
```

```
        break
    else:
        continue

def admin():          #sign up function for admin
    while True:
        while True:
            user_id=input("ENTER EXISTING ADMIN's ID : ")
            a=user_id.isdigit()
            if a==True:
                user_id=int(user_id)
                break
            else:
                print("ERROR! USER_ID must be in NUMBERS")
        password=input("Password : ")
        cur.execute("select user_id from admin")
        data=cur.fetchall()
        k=()
        count=0
        for i in data:
            k+=i
        if user_id in k:
            count+=1
        else:
            count+=0
        cur.execute("select password from admin")
        data1=cur.fetchall()
```



```
p=()
ct=0
for i in data1:
    p+=i
if password in p:
    ct+=1
else:
    ct+=0
if count==1 and ct==1:
    print(" ")
    print("ENTER NEW RECORDS")
    print(" ")
    while True:
        user_id2=input("NEW ADMIN's ID : ")
        a=user_id2.isdigit()
        if a==True:
            user_id2=int(user_id2)
            break
        else:
            print("ERROR! USER ID must be in NUMBERS")
    password=input("Password : ")
    repass=input("Confirm Password : ")
    if password==repass:
        cur.execute("insert into admin
values(%s,'%s','%s')"%(user_id2,password,user_id))
        con.commit()
        print("CHANGES SUCCESSFULLY SAVED!")
        break
```

```
    else:
        print("ERROR! THE ENTERED PASSWORD and the
CONFIRMATION PASSWORD do not match")
        choice=input("DO YOU WANT TO SIGN UP AGAIN? : ")
        if choice in "Nn":
            break
        else:
            continue
    else:
        print("ERROR! YOU HAVE ENTERED A WRONG USER ID OR
PASSWORD. PLEASE RE-TRY")
        ch=input("DO YOU WANT TO RE-TRY? : ")
        if ch in "Nn":
            break
        else:
            continue
```

```
def reception():          #sign up function for reception
    while True:
        while True:
            user_id=input("ENTER EXISTING ADMIN's ID : ")
            a=user_id.isdigit()
            if a==True:
                user_id=int(user_id)
                break
            else:
                print("ERROR! USER ID must be in NUMBERS")
```

```
password=input("Password : ")
cur.execute("select user_id from admin")
data=cur.fetchall()
k=()
count=0
for i in data:
    k+=i
if user_id in k:
    count+=1
else:
    count+=0
cur.execute("select password from admin")
data1=cur.fetchall()
p=()
ct=0
for i in data1:
    p+=i
if password in p:
    ct+=1
else:
    ct+=0
if count==1 and ct==1:
    print(" ")
    print("ENTER NEW RECORDS")
    print(" ")
    while True:
        user_id2=input("NEW RECEPTIONIST's ID : ")
```

```
a=user_id2.isdigit()
if a==True:
    user_id2=int(user_id2)
    break
else:
    print("ERROR! USER ID must be in NUMBERS")
password=input("Password : ")
repass=input("Confirm Password : ")
if password==repass:
    cur.execute("insert into reception
values(%s,'%s','%s')"%(user_id2,password,user_id))
    con.commit()
    print("CONGRATULATIONS!!!CHANGES SUCCESSFULLY
SAVED!")
    break
else:
    print("ERROR! the ENTERED PASSWORD and the
CONFIRMATION PASSWORD do not match")
    choice=input("DO YOU WANT TO SIGN UP AGAIN? : ")
    if choice in "Nn":
        break
    else:
        continue
```

```
def update_patient():          #updating patient information
    while True:
        print("1. UPDATE NAME")
        print("2. UPDATE GENDER")
        print("3. UPDATE AGE")
        print("4. UPDATE ADDRESS")
        print("5. UPDATE CONTACT")
        print("6. UPDATE EMAIL")
        print("7. UPDATE ROOM")
        print("8. UPDATE BED")
        choice=input("Enter your choice : ")
        if choice=='1':
            while True:
                p_id=input("Enter patient ID : ")
                a=p_id.isdigit()
                if a==True:
                    p_id=int(p_id)
                    break
            else:
                print("ERROR! Patient ID must be in NUMBERS")
            new=input("Enter new NAME : ")
            cur.execute("update patient set name='%s' where p_id=%s"
"%s"(new,p_id))
```

```
con.commit()
print("UPDATE WAS SUCCESSFUL")
ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
if ch in "Nn":
    break
else:
    continue
elif choice=='2':
    while True:
        p_id=input("Enter patient ID : ")
        a=p_id.isdigit()
        if a==True:
            p_id=int(p_id)
            break
        else:
            print("ERROR! Patient ID must be in NUMBERS")
    new=input("Enter new GENDER : ")
    cur.execute("update patient set gender='%s' where p_id=%s"
"%(new,p_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
    else:
        continue
elif choice=='3':
    while True:
```

```
p_id=input("Enter patient ID : ")
a=p_id.isdigit()
if a==True:
    p_id=int(p_id)
    break
else:
    print("ERROR! Patient ID must be in NUMBERS")
while True:
    new=input("Enter new AGE : ")
    a=new.isdigit()
    if a==True:
        new=int(new)
        break
    else:
        print("ERROR! Patient AGE must be in NUMBERS")
cur.execute("update patient set age=%s where p_id=%s"
"%(new,p_id))
con.commit()
print("UPDATE WAS SUCCESSFUL")
ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
if ch in "Nn":
    break
else:
    continue
elif choice=='4':
    while True:
        p_id=input("Enter patient ID : ")
        a=p_id.isdigit()
```

```
        if a==True:
            p_id=int(p_id)
            break
        else:
            print("ERROR! Patient ID must be in NUMBERS")
    new=input("Enter new ADDRESS : ")
    cur.execute("update patient set address='%s' where p_id=%s"
"%%(new,p_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
    else:
        continue
elif choice=='5':
    while True:
        p_id=input("Enter patient ID : ")
        a=p_id.isdigit()
        if a==True:
            p_id=int(p_id)
            break
        else:
            print("ERROR! Patient ID must be in NUMBERS")
    while True:
        new=input("Enter new CONTACT : ")
        a=new.isdigit()
        if a==True:
```



```
        new=int(new)
        break
    else:
        print("ERROR! Patient CONTACT must be in NUMBERS")
        cur.execute("update patient set contact=%s where p_id=%s"
"%%(new,p_id))
        con.commit()
        print("UPDATE WAS SUCCESSFUL")
        ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
        if ch in "Nn":
            break
        else:
            continue
elif choice=='6':
    while True:
        p_id=input("Enter patient ID : ")
        a=p_id.isdigit()
        if a==True:
            p_id=int(p_id)
            break
        else:
            print("ERROR! Patient ID must be in NUMBERS")
        new=input("Enter new EMAIL : ")
        cur.execute("update patient set email='%s' where p_id=%s"
"%%(new,p_id))
        con.commit()
        print("UPDATE WAS SUCCESSFUL")
        ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
```

```
    if ch in "Nn":
        break
    else:
        continue
elif choice=='7':
    while True:
        p_id=input("Enter patient ID : ")
        a=p_id.isdigit()
        if a==True:
            p_id=int(p_id)
            break
        else:
            print("ERROR! Patient ID must be in NUMBERS")
    while True:
        new=input("Enter new ROOM : ")
        a=new.isdigit()
        if a==True:
            new=int(new)
            break
        else:
            print("ERROR! Patient ROOM must be in NUMBERS")
    cur.execute("update patient set room=%s where p_id=%s"
"%s"(new,p_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
```

```
else:
    continue
elif choice=='8':
    while True:
        p_id=input("Enter patient ID : ")
        a=p_id.isdigit()
        if a==True:
            p_id=int(p_id)
            break
        else:
            print("ERROR! Patient ID must be in NUMBERS")
    while True:
        new=input("Enter new BED : ")
        a=new.isdigit()
        if a==True:
            new=int(new)
            break
        else:
            print("ERROR! Patient BED must be in NUMBERS")
    cur.execute("update patient set bed=%s where p_id=%s"
"%s"(new,p_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
    else:
        continue
```

```

else:
    print("\t SORRY! YOU HAVE SELECTED THE WRONG
OPTION. ")
    print("\t THANKK YOU")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
    else:
        continue

```

```

def doctor_update():          #updating doctors information
    ch="Y"
    while ch in "Yy" :
        print("1. UPDATE NAME")
        print("2. UPDATE SPECIALITY")
        print("3. UPDATE GENDER")
        print("4. UPDATE AGE")
        print("5. UPDATE SALARY")
        print("6. UPDATE CONTACT")
        print("7. UPDATE EMAIL")
        print("8. UPDATE ROOM")
        choice=input("Enter your choice : ")
        if choice=='1':
            while True:
                d_id=input("Enter doctor ID : ")
                a=d_id.isdigit()
                if a==True:

```

```
        d_id=int(d_id)
        break
    else:
        print("ERROR! Doctor ID must be in NUMBERS")
    new=input("Enter new NAME : ")
    cur.execute("update doctor set name='%s' where d_id=%s"
"%%(new,d_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
    else:
        continue
elif choice=='2':
    while True:
        d_id=input("Enter doctor ID : ")
        a=d_id.isdigit()
        if a==True:
            d_id=int(d_id)
            break
        else:
            print("ERROR! Doctor ID must be in NUMBERS")
    new=input("Enter new SPECIALITY : ")
    cur.execute("update doctor set speciality='%s' where d_id=%s"
"%%(new,d_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
```

```
ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
if ch in "Nn":
    break
else:
    continue
elif choice=='3':
    while True:
        d_id=input("Enter doctor ID : ")
        a=d_id.isdigit()
        if a==True:
            d_id=int(d_id)
            break
        else:
            print("ERROR! Doctor ID must be in NUMBERS")
    new=input("Enter new GENDER : ")
    cur.execute("update doctor set gender='%s' where d_id=%s"
"%s"(new,d_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
    else:
        continue
elif choice=='4':
    while True:
        d_id=input("Enter doctor ID : ")
        a=d_id.isdigit()
```

```
        if a==True:
            d_id=int(d_id)
            break
        else:
            print("ERROR! Doctor ID must be in NUMBERS")
    new=input("Enter new AGE : ")
    cur.execute("update doctor set age=%s where d_id=%s"
"%s"(new,d_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
    else:
        continue
elif choice=='5':
    while True:
        d_id=input("Enter doctor ID : ")
        a=d_id.isdigit()
        if a==True:
            d_id=int(d_id)
            break
        else:
            print("ERROR! Doctor ID must be in NUMBERS")
    while True:
        new=input("Enter doctor salary : ")
        a=new.isdigit()
        if a==True:
```

```
        new=int(new)
        break
    else:
        print("ERROR! Doctor SALARY must be in NUMBERS")
    cur.execute("update doctor set salary=%s where d_id=%s"
"%%(new,d_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
    else:
        continue
elif choice=='6':
    while True:
        d_id=input("Enter doctor ID : ")
        a=d_id.isdigit()
        if a==True:
            d_id=int(d_id)
            break
        else:
            print("ERROR! Doctor ID must be in NUMBERS")
    while True:
        new=input("Enter doctor contact : ")
        a=new.isdigit()
        if a==True:
            new=int(new)
            break
```



```
    else:
        print("ERROR! Doctor ID must be in NUMBERS")
        cur.execute("update doctor set contact=%s where d_id=%s"
"%%(new,d_id))
        con.commit()
        print("UPDATE WAS SUCCESSFUL")
        ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
        if ch in "Nn":
            break
        else:
            continue
elif choice=='7':
    while True:
        d_id=input("Enter doctor ID : ")
        a=d_id.isdigit()
        if a==True:
            d_id=int(d_id)
            break
        else:
            print("ERROR! Doctor ID must be in NUMBERS")
            new=input("Enter new EMAIL : ")
            cur.execute("update doctor set email='%s' where d_id=%s"
"%%(new,d_id))
            con.commit()
            print("UPDATE WAS SUCCESSFUL")
            ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
            if ch in "Nn":
                break
```

```
    else:
        continue
elif choice=='8':
    while True:
        d_id=input("Enter doctor ID : ")
        a=d_id.isdigit()
        if a==True:
            d_id=int(d_id)
            break
        else:
            print("ERROR! Doctor ID must be in NUMBERS")
    while True:
        new=input("Enter doctor room : ")
        a=new.isdigit()
        if a==True:
            new=int(new)
            break
        else:
            print("ERROR! Doctor ROOM must be in NUMBERS")
    cur.execute("update doctor set room=%s where d_id=%s"
"%s"(new,d_id))
    con.commit()
    print("UPDATE WAS SUCCESSFUL")
    ch=input("DO YOU WANT TO CONTINUE UPDATING? (Y/N)")
    if ch in "Nn":
        break
    else:
        continue
```

```

else:
    print("SORRY! YOU HAVE SELECTED THE WRONG OPTION.
")
    print("THANKK YOU")
    ch=eval(input("DO YOU WANT TO CONTINUE UPDATING?
(Y/N)"))
    if ch in "Nn":
        break
    else:
        continue

```

```

def delete_p_records():          #delete patient records
    ch="Yy"
    while True:
        while True:
            p_id=input("Enter DELETING ID : ")
            a=p_id.isdigit()
            if a==True:
                p_id=int(p_id)
                break
            else:
                print("ERROR! ID must be in NUMBERS")
        p=cur.execute("select p_id from patient ")
        b=cur.fetchall()
        k=()
        for i in b:
            k+=i

```

```

if p_id in k:
    cur.execute("delete from patient where p_id=%s"%(p_id))
    con.commit()

    print("PATIENT ID ",p_id," HAS BEEN DELETED
SUCCESSSSFULLY")
else:
    print("PATIENT ID ",p_id," DOES NOT EXIST")
    choice=input("DO YOU WANT TO DELETE ANY OTHER
RECORD (Y/N) : ")
    if choice in "Nn":
        break
    else:
        continue

```

```

def delete_d_records():          #delete doctor records
    ch="Yy"
    while True:
        while True:
            d_id=input("Enter DELETING ID : ")
            a=d_id.isdigit()
            if a==True:
                d_id=int(d_id)
                break
            else:
                print("ERROR! ID must be in NUMBERS")
        cur.execute("select d_id from doctor ")

```

```

b=cur.fetchall()
k=()
for i in b:
    k+=i
if d_id in k:
    cur.execute("delete from doctor where d_id=%s"%(d_id))
    con.commit()
    print("DOCTOR ID '",d_id,'" HAS BEEN DELETED
SUCCESSFULLY")
else:
    print("DOCTOR ID '",d_id,'" DOES NOT EXIST")
    choice=input("DO YOU WANT TO DELETE ANY OTHER
RECORD (Y/N) : ")
    if choice in "Nn":
        break
    else:
        continue

```

```

def appointment():          #booking an appointment
    while True:
        ch="y"
        while ch in "Yy":
            cur.execute("select name,speciality from doctor")
            data=cur.fetchall()
            info=[]
            for i in data:

```

```

        info.append(i)
while True:
    p_id=input("Patient ID : ")
    a=p_id.isdigit()
    if a==True:
        p_id=int(p_id)
        break
    else:
        print("ERROR! Patient ID must be in NUMBERS")
for i in info:
    print("\nName = ",i[0])
    print("Speciality = ",i[1])
    a_w_d=str(input("\nENTER A DOCTOR'S NAME FROM THE
ABOVE LIST WITH WHOM YOU WANT TO BOOK AN APPOINTMENT
: "))
    cur.execute("select name from doctor")
    data1=cur.fetchall()
    k=()
    for i in data1:
        k+=i
    if a_w_d in k:
        pass
    else:
        print("\n ERROR! YOU HAVE ENTER A WRONG DOCTOR'S
NAME. PLEASE RE-CHECK.")
        print("\n")
        break
    name=str(input("Patient Name : "))

```

```

gender=str(input("Patient Gender : "))
while True:
    age=input("Patient Age : ")
    a=age.isdigit()
    if a==True:
        age=int(age)
        break
    else:
        print("ERROR! Patient AGE must be in NUMBERS")
address=str(input("Patient Address : "))
while True:
    contact=input("Patient Contact : ")
    a=contact.isdigit()
    if a==True:
        contact=int(contact)
        break
    else:
        print("ERROR! Patient CONTACT must be in NUMBERS")
email=input("Patient Email : ")
date=input("When do you wish to visit (yyyy-mm-dd) : ")
cur.execute("insert into appointment
values(%s,'%s','%s','%s',%s,'%s',%s,'%s','%s')
"%(p_id,a_w_d,name,gender,age,address,contact,email,date))
con.commit()

print("\n CONGRATULATIONS!!!YOU HAVE SUCCESSFULLY
BOOKED AN APPOINTMENT ")

break

ch=input("DO YOU WANT TO TAKE A NEW APPOINTMENT?
(Y/N) : ")

```

```

if ch in 'Nn':
    break
else:
    continue

```

```

def search_patient():                #search for patient
    while True:
        while True:
            ct=0
            search=input("ENTER THE SEARCHING VALUE : ")
            while True:
                if search==" " or search in " ":
                    ct+=1
                    break
                elif search in
('m','M','male','MALE','Male','f','F','female','Female','FEMALE'):
                    ct+=1
                    break
                else:
                    ct+=0
                    break
            if ct==1:
                print("ERROR! YOU CANT'T SEARCH EMPTY VALUES. ")
            else:
                break
        a=search.isdigit()

```



```
if a==True:
    search=int(search)
    cur.execute('select * from patient')
    data=cur.fetchall()
    info=list()
    for i in data:
        info.append(i)
    count=0
    while True:
        for i in info:
            if search in i:
                print("\nPatient Id = ",i[0])
                print("Patient Name = ",i[1])
                print("Gender = ",i[2])
                print("Age = ",i[3])
                print("Address = ",i[4])
                print("Contact = ",i[5])
                print("E-Mail = ",i[6])
                print("Room No. = ",i[7])
                print("Bed No. = ",i[8],"\n")
                count+=1
            else:
                continue
        if count>=1:
            break
        else:
            print("SORRY! THE RECORD YOU ARE LOOKING FOR IS
NOT AVAILABLE IN THE DATABASE")
```

```
break
```

```
ch=input("Do you want to continue? (Y/N) : ")
```

```
if ch in "Nn":
```

```
    break
```

```
else:
```

```
    pass
```

```
def search_doctor():                #search for doctor
```

```
    while True:
```

```
        while True:
```

```
            ct=0
```

```
            search=input("ENTER THE SEARCHING ELEMENT : ")
```

```
            while True:
```

```
                if search==" " or search in "      " :
```

```
                    ct+=1
```

```
                    break
```

```
                elif search in
```

```
                ('m','M','male','MALE','Male','f','F','female','Female','FEMALE'):
```

```
                    ct+=1
```

```
                    break
```

```
                else:
```

```
                    ct+=0
```

```
                    break
```

```
            if ct==1:
```

```
                print("ERROR! YOU CANT'T SEARCH EMPTY VALUES. ")
```

```
            else:
```

```
        break
a=search.isdigit()
if a==True:
    search=int(search)
cur.execute('select * from doctor')
data=cur.fetchall()
info=list()
for i in data:
    info.append(i)
count=0
while True:
    for i in info:
        if search in i:
            print("\nDoctor id = ",i[0])
            print("Patient Name = ",i[1])
            print("Speciality = ",i[2])
            print("Gender = ",i[3])
            print("Age = ",i[4])
            print("Contact = ",i[6])
            print("E-Mail = ",i[7])
            print("Room No. = ",i[8],"\\n")
            count+=1
        else:
            continue
    if count>=1:
        break
    else:
```

```
print("SORRY! THE RECORD YOU ARE LOOKING FOR IS  
NOT AVAILABLE IN THE DATABASE")
```

```
break
```

```
ch=input("Do you want to continue? (Y/N) : ")
```

```
if ch in "Nn":
```

```
    break
```

```
else:
```

```
    continue
```

```
def show_messages():
```

```
    while True:
```

```
        while True:
```

```
            cur.execute("select messages from messages")
```

```
            data=cur.fetchall()
```

```
            info=()
```

```
            for i in data:
```

```
                info+=i
```

```
            print("\n1. Show latest 3 new messages")
```

```
            print("2. Show all messages")
```

```
            print("")
```

```
            ch=input("ENTER YOUR CHOICE : ")
```

```
            if ch=='1':
```

```
                print("1. ",info[-1])
```

```
                print("2. ",info[-2])
```

```

        print("3. ",info[-3])
    elif ch=='2':
        for i in range(0,len(info)):
            print(info[i])
    else:
        print("\nSORRY! YOU HAVE ENTERED A WRONG
CHOICE.")
        break
    rep=input("Do you want to continue seeing messages (Y/N) : ")
    if rep in "Nn":
        break
    else:
        continue

```

```

def admin_log_in():                #log in function for admin
    chh="y"
    while chh in "Yy":
        while True:
            user_id=input("ADMIN's ID : ")
            h=user_id.isdigit()
            if h==True:
                break
            else:
                print("ERROR! ADMIN'S ID MUST BE IN NUMBERS ONLY.")

```

```
user_id=int(user_id)
password=input("Password : ")
cur.execute("select user_id,password from admin")
data=cur.fetchall()
c=0
for i in range(0,len(data)):
    if (user_id,password)==data[i]:
        c+=1
        break
    else:
        c+=0
if c==1:

    chh="y"
    while chh in "Yy":
        print(" ")
        print("welcome")
        print(" ")
        print("1. DOCTORS ")
        print("2. PATIENTS ")
        print("3. MESSAGES ")
        print("4. Display ALL Doctors ")
        print("5. Display ALL Patient ")
        m=input("ENTER YOUR choice : ")
        if m=='1':
            print("1. ENTER NEW DOCTOR ")
            print("2. DELETE DOCTOR'S RECORD ")
```

```
print("3. UPDATE DOCTOR'S RECORD ")
n=input("ENTER YOUR CHOICE : ")
print(" ")
if n=='1':
    doctor_inputs()
elif n=='2':
    delete_d_records()
elif n=='3':
    doctor_update()
else:
    print("YOU HAVE ENTERED A WRONG CHOICE.
PLEASE MAKE SURE TO ENTER A CHOICE FROM THE LIST
PROVIDED")

p=input("DO YOU WANT TO CONTINUE YOUR
SERVICE WITH THE DOCTOR'S PAGE : ")
if p in "Nn":
    print("THANK YOU!")
    break
elif m=='2':
    print("1. ENTER NEW PATIENT ")
    print("2. DELETE PATIENT'S RECORD ")
    print("3. UPDATE PATIENT'S RECORD ")
    n=input("ENTER YOUR CHOICE : ")
    if n=='1':
        patient_inputs()
    elif n=='2':
        delete_p_records()
    elif n=='3':
```

```
        update_patient()
    else:
        print("YOU HAVE ENTERED A WRONG CHOICE.
PLEASE MAKE SURE TO ENTER A CHOICE FROM THE LIST
PROVIDED")

        p=input("DO YOU WANT TO CONTINUE YOUR
SERVICE WITH THE DOCTOR'S PAGE : ")
        if p in "Nn":
            print("THANK YOU!")
            break
    elif m=='3':
        show_messages()
    elif m=='4':
        display_doctor()
        break
    elif m=='5':
        display_patient()
        break
    else:
        print("YOU HAVE ENTERED A WRONG CHOICE. PLEASE
MAKE SURE TO ENTER A CHOICE FROM THE LIST PROVIDED")
        chh=input("Do you want to continue? (N/Y) : ")
    else:
        print("ERROR! the ENTERED PASSWORD or the USER ID is
incorrect. Please re-try!")
        choice=input("DO YOU WANT TO RE-TRY ? : ")
        if choice in "Nn":
            print("THANK YOU!")
            break
```



```
def reception_log_in():          #log in function for reception
    while True:
        while True:
            user_id=input("RECEPTIONIST's ID : ")
            h=user_id.isdigit()
            if h==True:
                break
            else:
                print("ERROR! RECEPTIONIST'S ID MUST BE IN NUMBERS
ONLY.")
            user_id=int(user_id)
            password=input("Password : ")
            cur.execute("select user_id,password from reception")
            data=cur.fetchall()
            c=0
            for i in range(0,len(data)):
                if (user_id,password)==data[i]:
                    c+=1
                    break
            else:
                c+=0
        if c==1:
            print(" ")
            print("welcome")
```

```
print(" ")
print("1. ENTER NEW PATIENT ")
print("2. DELETE PATIENT'S RECORD ")
print("3. UPDATE PATIENT'S RECORD ")
print("4. Display ALL Patient")
n=input("ENTER YOUR CHOICE : ")
if n=='1':
    patient_inputs()
elif n=='2':
    delete_p_records()
elif n=='3':
    update_patient()
elif n=='4':
    display_patient()
    break
else:
    print("YOU HAVE ENTERED A WRONG CHOICE. PLEASE
MAKE SURE TO ENTER A CHOICE FROM THE LIST PROVIDED")
    ch=input("DO YOU WANT TO CONTINUE YOUR SERVICE
WITH THE DOCTOR'S PAGE : ")
    if ch in "Nn":
        print("THANK YOU!")
        break

else:
    print("ERROR! the ENTERED PASSWORD or the USER ID is
incorrect. Please re-try!")
    choice=input("DO YOU WANT TO RE-TRY ? (Y/N) : ")
```

```
if choice in "Nn":  
    print("THANK YOU!")  
    break
```

```
def search():          #search function for both doctors and patient  
    while True:  
        print("1. SEARCH DOCTOR")  
        print("2. SEARCH PATIENT")  
        choice=input("ENTER YOUR CHOICE : ")  
        if choice=='1':  
            search_doctor()  
        elif choice=='2':  
            search_patient()  
        else:  
            print("ERROR! YOU HAVE ENTERED A WORNG CHOICE.  
PLEASE RE-TRY")  
            ch=input("ENTER YOUR CHOICE : ")  
            if ch in "Nn":  
                break  
            else:  
                continue
```

```
def contact_us():
```

```

while True:
    user_name=input("ENTER YOUR NAME : ")
    contact=int(input("ENTER YOUR CONTACT : "))
    message=input("TYPE YOUR MESSAGE HERE : ")
    cur.execute("insert into messages
values('%s','%s','%s')"%(user_name, contact, message))
    con.commit()
    print("\nSENDING...")
    print("\nSEND SUCCESSFUL")
    print("\nTHANK YOU")
    ch=input(" Do you want to continue contacting us? (Y/N) : ")
    if ch in "Nn":
        break
    else:
        continue

```

```

def help_me():
    while True:
        print("\nHello there. Welcome to BAHBAI HOSPITAL
MANAGEMENT SYSTEM. Here we do task like:")
        print("\nA quick walk-through the application:")
        print("\nWhen you open this application, you will be directed to the
main screen. From there you will get various options.")
        print("You need to select the option that provides the servise you
are looking for with BAHBAI HOSPITAL MANAGEMENT SYSTEM.")

```

```
print("Also you will be provided with an input box. Select an option
in NUMBER ")
```

```
print("After selecting an option of your choice,if you choose log in
options (OPTION 1 AND 2 ), ")
```

```
print("you will be asked to enter user id and password to further
proceed. ")
```

```
print("\nOption 3. SEARCH is open to all users. In it, you can
search a patient or a doctor.")
```

```
print("\nOption 4. appointment is for booking an appointment with
any doctor of your choice.")
```

```
print("\nOption 5. SIGN UP is a function in which you can sign up
for ADMIN OR RECEPTIONIST. ")
```

```
print("\t\t NOTE: OPTION 5. SIGN UP requires an admin's access
for further processing.")
```

```
print("\t\t\t i.e. you will need an existing admin's user id and
password to sign up.")
```

```
print("\nOPTION 6. is for contacting us. You can write a re-view for
us or any question regarding medical purposes.")
```

```
print("\nOPTION 7. is this service going-on")
```

```
print("\nOPTION 8. is for quitting the program and leaving this site.")
```

```
print("\n \n ANY MORE ASSISSTANCE CAN BE PROVIDED BY
OPTION 6. FEEL FREE TO USE IT.")
```

```
print("\n \n \t\t\t THANK YOU!")
```

```
break
```

```
def display_patient():
```

```
cur.execute("use hospital")
cur.execute("select * from patient")
data=cur.fetchall()
print("-----")
for i in data:
    print("\nPatient ID = ",i[0])
    print("Name = ",i[1])
    print("Gender = ",i[2])
    print("Age = ",i[3])
    print("Address = ",i[4])
    print("Contact = ",i[5])
    print("E-mail = ",i[6])
    print("Room = ",i[7])
    print("Bed = ",i[8])
    print("\n-----")
```

```
def display_doctor():
    cur.execute("use hospital")
    cur.execute("select * from doctor")
    data=cur.fetchall()
    print("-----")
    for i in data:
        print("\nDoctor ID = ",i[0])
        print("Name = ",i[1])
```

```

print("Speciality = ",i[2])
print("Gender = ",i[3])
print("Age = ",i[4])
print("Salary = ",i[5]," Rs.")
print("Contact = ",i[6])
print("E-mail = ",i[7])
print("Room = ",i[8])
print("\n-----")

```

```
def owner():
```

```

    print("ADMIN Log in:")
    print("\t user id = 1234")
    print("\t password = hello1234")
    print("\n\nRECEPTION Log in:")
    print("\t user id = 12345")
    print("\t password = hello12345")

```

```
#main area
```

```

print(" ")
print("\t\t*****")
print("\t\t*** ..... ***)

```

```
print("\t\t**....WELCOME TO AL BAHBAI HOSPITAL....**")
print("\t\t***.....**")
print("\t\t*****")
print(" ")
ch="y"
while ch=="y":
    print("Please choose a service:")
    print("\n\t1. ADMIN")
    print("\t2. RECEPTION USER")
    print("\t3. SEARCH")
    print("\t4. APPOINTMENT")
    print("\t5. SIGN UP")
    print("\t6. CONTACT US")
    print("\t7. HELP!")
    print("\t8. QUIT")
    choice=input("\t\tENTER YOUR CHOICE : ")

    if choice=='1':
        admin_log_in()

    elif choice=='2':
        reception_log_in()

    elif choice=='3':
```



```
search()

elif choice=='4':
    appointment()

elif choice=='5':
    print("SIGN UP AS:")
    print("1. ADMIN")
    print("2. RECEPTIONIST")
    choice=input("ENTER YOUR CHOICE : ")
    if choice=='1':
        admin()
    elif choice=='2':
        reception()
    else:
        print("ERROR! YOU HAVE ENTERED A WRONG CHOICE.
PLEASE RE-TRY")
        ch=input("DO YOU WANT TO CONTINUE FOR SIGN UP
AGAIN? : ")
        if ch in "Nn":
            break

elif choice=='6':
    contact_us()

elif choice=='7':
    help_me()
```

```
elif choice=='8':  
    quit()  
  
elif choice=='2003':  
    owner()  
  
else:  
    print("\t \n SORRY! YOU HAVE SELECTED THE WRONG OPTION.  
PLEASE MAKE SURE FOR WHAT SERVICE YOU ARE LOOKING  
FOR.")  
    print("\t \n THANKK YOU")  
    ch=input("\n DO YOU WISH TO CONTINUE THE PROGRAM AGAIN  
: (Y/N)")  
    if ch in "Nn":  
        break
```

7. *OUTPUT SCREENS*

```
ENTER YOUR MYSQL PASSWORD : faysal
```

```
connecting...  
connection successful
```

```
DATABASE EXIST
```

```
*****  
***.....**  
**....WELCOME TO AL BAHBAI HOSPITAL....**  
***.....**  
*****
```

```
Please choose a service:
```

1. ADMIN
2. RECEPTION USER
3. SEARCH
4. APPOINTMENT
5. SIGN UP
6. CONTACT US
7. HELP!
8. QUIT

```
ENTER YOUR CHOICE : |
```

ADMIN:

```
ADMIN's ID : 1234
Password : hello1234
welcome
```

```
1. DOCTORS
2. PATIENTS
3. MESSAGES
4. Display ALL Doctors
5. Display ALL Patient
ENTER YOUR choice : 1
1. ENTER NEW DOCTOR
2. DELETE DOCTOR'S RECORD
3. UPDATE DOCTOR'S RECORD
ENTER YOUR CHOICE : 1
```

```
Doctor ID : 1443
Doctor's Name : sami
Speciality In : ENT
Gender : m
Age : 32
Salary : 223451
Contact : 234453211
Email : sami@gmail.com
Doctor's Room No. : 5
CHANGES SUCCESSFULLY SAVED!
DO YOU WANT TO ENTER NEW RECORDS? (Y/N)n
```

Output:

d_id	name	speciality	gender	age	salary	contact	email
	room						
132	chole	ENT	f	32	3000	35355456	maria12345@gmail.com
155	haji	local doc	m	55	400	12345678	haji@gmail.com
1234	ali	local doc	f	16	230000	234455454	ali@gmail.com
1443	sami	ENT	m	32	223451	234453211	sami@gmail.com
1888	faysal	ent	m	18	111	32553432	faysal@gmail.com
5434	ahmed	regular	m	34	830000	23774454	ahmed@gmail.com
13243	manga	regular	m	43	46456536	646655657	manga@gmail.com
1362423	manga	regular	m	43	46456536	646655657	manga@gmail.com
13562423	manga	regular	m	43	46456536	646655657	manga@gmail.com

```

1. DOCTORS
2. PATIENTS
3. MESSAGES
4. Display ALL Doctors
5. Display ALL Patient
ENTER YOUR choice : 1
1. ENTER NEW DOCTOR
2. DELETE DOCTOR'S RECORD
3. UPDATE DOCTOR'S RECORD
ENTER YOUR CHOICE : 2

Enter DELETING ID : 1443
DOCTOR ID ' 1443 ' HAS BEEN DELETED SUCCESSSSFULLY
DO YOU WANT TO DELETE ANY OTHER RECORD (Y/N) : n

```

Output:

```

mysql> select * from doctor;
+-----+-----+-----+-----+-----+-----+-----+-----+
| d_id   | name   | speciality | gender | age  | salary  | contact  | email  |
|-----+-----+-----+-----+-----+-----+-----+-----+
| 132    | chole  | ENT        | f      | 32   | 3000    | 35355456 | marial |
| 2345@gmail.com | 9      |            |        |      |         |          |        |
| 155    | haji   | local doc  | m      | 55   | 400     | 12345678 | haji@gmail.com |
| 1234   | ali    | local doc  | f      | 16   | 230000  | 234455454 | ali@gmail.com |
| 1888   | faysal | ent        | m      | 18   | 111     | 32553432 | faysal@gmail.com |
| 5434   | ahmed  | regular    | m      | 34   | 830000  | 23774454 | ahmed@gmail.com |
| 13243  | manga  | regular    | m      | 43   | 46456536 | 646655657 | manga@gmail.com |
| 1362423 | manga  | regular    | m      | 43   | 46456536 | 646655657 | manga@gmail.com |
| 13562423 | manga  | regular    | m      | 43   | 46456536 | 646655657 | manga@gmail.com |
+-----+-----+-----+-----+-----+-----+-----+-----+

```

```

1. ENTER NEW DOCTOR
2. DELETE DOCTOR'S RECORD
3. UPDATE DOCTOR'S RECORD
ENTER YOUR CHOICE : 3

1. UPDATE NAME
2. UPDATE SPECIALITY
3. UPDATE GENDER
4. UPDATE AGE
5. UPDATE SALARY
6. UPDATE CONTACT
7. UPDATE EMAIL
8. UPDATE ROOM
Enter your choice : 7
Enter doctor ID : 1888
Enter new EMAIL : no email
UPDATE WAS SUCCESSFUL
DO YOU WANT TO CONTINUE UPDATING? (Y/N)n

```

Output:

```

mysql> select * from doctor;
+-----+-----+-----+-----+-----+-----+-----+-----+
| d_id   | name   | speciality | gender | age  | salary | contact | email |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 132    | chole  | ENT       | f      | 32   | 3000   | 35355456 | maria1 |
| 2345@gmail.com | 9 | local doc | m      | 55   | 400    | 12345678 | haji@gmail.com |
| 155    | haji  | local doc | f      | 16   | 230000 | 234455454 | ali@gmail.com |
| 1234   | ali   | ent       | m      | 18   | 111    | 32553432 | no email |
| 1888   | faysal | regular   | m      | 34   | 830000 | 23774454 | ahmed@gmail.com |
| 5434   | ahmed | regular   | m      | 43   | 46456536 | 646655657 | manga@gmail.com |
| 13243  | manga | regular   | m      | 43   | 46456536 | 646655657 | manga@gmail.com |
| 1362423 | manga | regular   | m      | 43   | 46456536 | 646655657 | manga@gmail.com |
| 13562423 | manga | regular   | m      | 43   | 46456536 | 646655657 | manga@gmail.com |
+-----+-----+-----+-----+-----+-----+-----+-----+

```

welcome

```

1. DOCTORS
2. PATIENTS
3. MESSAGES
4. Display ALL Doctors
5. Display ALL Patient
ENTER YOUR choice : 2
1. ENTER NEW PATIENT
2. DELETE PATIENT'S RECORD
3. UPDATE PATIENT'S RECORD
ENTER YOUR CHOICE : 1
Patient ID : 1335
Patient Name : siyam
Patient Gender : m
Patient Age : 22
Patient Address : muharraq
Patient Contact : 213132224
Patient Email : siyam@gmail.com
Patient Room No. : 4
Patient Bed No. : 2
CONGRATULATIONS!!!CHANGES SUCCESSFULLY SAVED!
DO YOU WANT TO ENTER NEW RECORDS? (Y/N)n

```

Output:

```

mysql> select * from patient;
+-----+-----+-----+-----+-----+-----+-----+
| p_id | name | gender | age | address | contact | email |
| room | bed  |        |     |         |         |       |
+-----+-----+-----+-----+-----+-----+-----+
| 111  | klailea | f | 18 | delhi | 234435556 | klailea123@gmail.c |
om | 14 | 16 |    |      | 432543476 | david@gmail.com    |
| 145  | david  | m | 17 | arad  |          |          |
| 6    | 8      |   |    |      | 34567789  | laila@gmail.com    |
| 546  | laila  | f | 32 | isa town |          |          |
| 5    | 9      |   |    |      | 43356576786 | dek@gmail.com      |
| 1235 | decker | m | 24 | utah  |          |          |
| 4    | 5      |   |    |      | 213132224 | siyam@gmail.com    |
| 1335 | siyam  | m | 22 | muharraq |          |          |
| 4    | 2      |   |    |      | 24342354  | faysal123@gmail.co |
| 12345 | faysal | m | 18 | bahrain |          |          |
m | 3 | 7 |    |      | 43342535  | ahmed@gmail.com    |
| 123456 | ahmed | m | 32 | hala  |          |          |
| 4    | 12     |   |    |      | 2323232323 | hayat@gmail.com    |
| 432532 | hayat | f | 22 | hala  |          |          |
| 2    | 3      |   |    |      |          |          |
+-----+-----+-----+-----+-----+-----+-----+

```

```

1. ENTER NEW PATIENT
2. DELETE PATIENT'S RECORD
3. UPDATE PATIENT'S RECORD
ENTER YOUR CHOICE : 2
Enter DELETING ID : 1335
PATIENT ID ' 1335 ' HAS BEEN DELETED SUCCESSFULLY
DO YOU WANT TO DELETE ANY OTHER RECORD (Y/N) : n

```

Output:

```

mysql> select * from patient;
+-----+-----+-----+-----+-----+-----+-----+
| p_id | name | gender | age | address | contact | email |
| room | bed | | | | | |
+-----+-----+-----+-----+-----+-----+-----+
| 111 | klailea | f | 18 | delhi | 234435556 | klailea123@gmail.c |
om | 14 | 16 | | | | |
| 145 | david | m | 17 | arad | 432543476 | david@gmail.com |
| 6 | 8 | | | | | |
| 546 | laila | f | 32 | isa town | 34567789 | laila@gmail.com |
| 5 | 9 | | | | | |
| 1235 | decker | m | 24 | utah | 43356576786 | dek@gmail.com |
| 4 | 5 | | | | | |
| 12345 | faysal | m | 18 | bahrain | 24342354 | faysal123@gmail.co |
m | 3 | 7 | | | | |
| 123456 | ahmed | m | 32 | hala | 43342535 | ahmed@gmail.com |
| 4 | 12 | | | | | |
| 432532 | hayat | f | 22 | hala | 2323232323 | hayat@gmail.com |
| 2 | 3 | | | | | |
+-----+-----+-----+-----+-----+-----+-----+

```



```

1. ENTER NEW PATIENT
2. DELETE PATIENT'S RECORD
3. UPDATE PATIENT'S RECORD
ENTER YOUR CHOICE : 3
1. UPDATE NAME
2. UPDATE GENDER
3. UPDATE AGE
4. UPDATE ADDRESS
5. UPDATE CONTACT
6. UPDATE EMAIL
7. UPDATE ROOM
8. UPDATE BED
Enter your choice : 4
Enter patient ID : 1335
Enter new ADDRESS : hidd
UPDATE WAS SUCCESSFUL
DO YOU WANT TO CONTINUE UPDATING? (Y/N)n

```

Output:

```

mysql> select * from patient;
+-----+-----+-----+-----+-----+-----+-----+
| p_id | name | gender | age | address | contact | email |
| room | bed | | | | | |
+-----+-----+-----+-----+-----+-----+-----+
| 111 | klailea | f | 18 | delhi | 234435556 | klailea123@gmail.c |
om | 14 | 16 | | | | |
| 145 | david | m | 17 | arad | 432543476 | david@gmail.com |
| 6 | 8 | | | | | |
| 546 | laila | f | 32 | isa town | 34567789 | laila@gmail.com |
| 5 | 9 | | | | | |
| 1235 | decker | m | 24 | utah | 43356576786 | dek@gmail.com |
| 4 | 5 | | | | | |
| 1335 | siyam | m | 22 | hidd | 213132224 | siyam@gmail.com |
| 4 | 2 | | | | | |
| 12345 | faysal | m | 18 | bahrain | 24342354 | faysal123@gmail.co |
m | 3 | 7 | | | | |
| 123456 | ahmed | m | 32 | hala | 43342535 | ahmed@gmail.com |
| 4 | 12 | | | | | |
| 432532 | hayat | f | 22 | hala | 2323232323 | hayat@gmail.com |
| 2 | 3 | | | | | |
+-----+-----+-----+-----+-----+-----+-----+

```

welcome

1. DOCTORS
 2. PATIENTS
 3. MESSAGES
 4. Display ALL Doctors
 5. Display ALL Patient
- ENTER YOUR choice : 3

1. Show latest 3 new messages
2. Show all messages

ENTER YOUR CHOICE : 2

hello faysal. i m a big fn of u.. just kidding...dont be serious

hello

i will kill logan paul.

i m loki of asgard

hello world

i like it

hello there

bye world

hi

welcome

1. DOCTORS
2. PATIENTS
3. MESSAGES
4. Display ALL Doctors
5. Display ALL Patient
ENTER YOUR choice : 4

Doctor ID = 132
Name = chole
Speciality = ENT
Gender = f
Age = 32
Salary = 3000 Rs.
Contact = 35355456
E-mail = maria12345@gmail.com
Room = 9

Doctor ID = 155
Name = haji
Speciality = local doc
Gender = m
Age = 55
Salary = 400 Rs.
Contact = 12345678
E-mail = haji@gmail.com
Room = 4

Doctor ID = 1234
Name = ali
Speciality = local doc
Gender = f
Age = 16
Salary = 230000 Rs.
Contact = 234455454
E-mail = ali@gmail.com
Room = 5

Doctor ID = 1888
Name = faysal
Speciality = ent
Gender = m
Age = 18
Salary = 111 Rs.
Contact = 32553432
E-mail = no email
Room = 2

Doctor ID = 5434
Name = ahmed
Speciality = regular
Gender = m
Age = 34
Salary = 830000 Rs.
Contact = 23774454
E-mail = ahmed@gmail.com
Room = 9

welcome

1. DOCTORS
2. PATIENTS
3. MESSAGES
4. Display ALL Doctors
5. Display ALL Patient
ENTER YOUR choice : 5

Patient ID = 111
Name = klailea
Gender = f
Age = 18
Address = delhi
Contact = 234435556
E-mail = klailea123@gmail.com
Room = 14
Bed = 16

Patient ID = 145
Name = david
Gender = m
Age = 17
Address = arad
Contact = 432543476
E-mail = david@gmail.com
Room = 6
Bed = 8

Patient ID = 546
Name = laila
Gender = f
Age = 32
Address = isa town
Contact = 34567789
E-mail = laila@gmail.com
Room = 5
Bed = 9

Patient ID = 1235
Name = decker
Gender = m
Age = 24
Address = utah
Contact = 43356576786
E-mail = dek@gmail.com
Room = 4
Bed = 5

Patient ID = 12345
Name = faysal
Gender = m
Age = 18
Address = bahrain
Contact = 24342354
E-mail = faysal123@gmail.com
Room = 3
Bed = 7

RECEPTION USER:

Please choose a service:

1. ADMIN
2. RECEPTION USER
3. SEARCH
4. APPOINTMENT
5. SIGN UP
6. CONTACT US
7. HELP!
8. QUIT

ENTER YOUR CHOICE : 2

RECEPTIONIST's ID : 1234

Password : hello1111

welcome

1. ENTER NEW PATIENT
2. DELETE PATIENT'S RECORD
3. UPDATE PATIENT'S RECORD
4. Display ALL Patient

ENTER YOUR CHOICE : |

welcome

```

1. ENTER NEW PATIENT
2. DELETE PATIENT'S RECORD
3. UPDATE PATIENT'S RECORD
4. Display ALL Patient
ENTER YOUR CHOICE : 1
Patient ID : 1255
Patient Name : chhowa
Patient Gender : f
Patient Age : 22
Patient Address : dhaka
Patient Contact : 33323232
Patient Email : chhowa@gmail.com
Patient Room No. : 2
Patient Bed No. : 3
CONGRATULATIONS!!!CHANGES SUCCESSFULLY SAVED!
DO YOU WANT TO ENTER NEW RECORDS? (Y/N)n

```

Output:

```

mysql> select * from patient;
+-----+-----+-----+-----+-----+-----+-----+
| p_id | name | gender | age | address | contact | email |
| room | bed | | | | | |
+-----+-----+-----+-----+-----+-----+-----+
| 111 | klailea | f | 18 | delhi | 234435556 | klailea123@gmail.c |
om | 14 | 16 | | | | |
| 145 | david | m | 17 | arad | 432543476 | david@gmail.com |
| 6 | 8 | | | | | |
| 546 | laila | f | 32 | isa town | 34567789 | laila@gmail.com |
| 5 | 9 | | | | | |
| 1235 | decker | m | 24 | utah | 43356576786 | dek@gmail.com |
| 4 | 5 | | | | | |
| 1255 | chhowa | f | 22 | dhaka | 33323232 | chhowa@gmail.com |
| 2 | 3 | | | | | |
| 12345 | faysal | m | 18 | bahrain | 24342354 | faysal123@gmail.co |
m | 3 | 7 | | | | |
| 123456 | ahmed | m | 32 | hala | 43342535 | ahmed@gmail.com |
| 4 | 12 | | | | | |
| 432532 | hayat | f | 22 | hala | 2323232323 | hayat@gmail.com |
| 2 | 3 | | | | | |
+-----+-----+-----+-----+-----+-----+-----+

```

welcome

```

1. ENTER NEW PATIENT
2. DELETE PATIENT'S RECORD
3. UPDATE PATIENT'S RECORD
4. Display ALL Patient
ENTER YOUR CHOICE : 2
Enter DELETING ID : 1255
PATIENT ID ' 1255 ' HAS BEEN DELETED SUCCESSFULLY
DO YOU WANT TO DELETE ANY OTHER RECORD (Y/N) : n

```

Output:

```

mysql> select * from patient;
+-----+-----+-----+-----+-----+-----+-----+
| p_id | name | gender | age | address | contact | email |
| room | bed | | | | | |
+-----+-----+-----+-----+-----+-----+-----+
| 111 | klailea | f | 18 | delhi | 234435556 | klailea123@gmail.c |
om | 14 | 16 | | | | |
| 145 | david | m | 17 | arad | 432543476 | david@gmail.com |
| 6 | 8 | | | | | |
| 546 | laila | f | 32 | isa town | 34567789 | laila@gmail.com |
| 5 | 9 | | | | | |
| 1235 | decker | m | 24 | utah | 43356576786 | dek@gmail.com |
| 4 | 5 | | | | | |
| 12345 | faysal | m | 18 | bahrain | 24342354 | faysal123@gmail.co |
m | 3 | 7 | | | | |
| 123456 | ahmed | m | 32 | hala | 43342535 | ahmed@gmail.com |
| 4 | 12 | | | | | |
| 432532 | hayat | f | 22 | hala | 2323232323 | hayat@gmail.com |
| 2 | 3 | | | | | |
+-----+-----+-----+-----+-----+-----+-----+

```

welcome

1. ENTER NEW PATIENT
2. DELETE PATIENT'S RECORD
3. UPDATE PATIENT'S RECORD
4. Display ALL Patient

ENTER YOUR CHOICE : 3

1. UPDATE NAME
2. UPDATE GENDER
3. UPDATE AGE
4. UPDATE ADDRESS
5. UPDATE CONTACT
6. UPDATE EMAIL
7. UPDATE ROOM
8. UPDATE BED

Enter your choice : 6

Enter patient ID : 1255

Enter new EMAIL : chooooo@gmail.com

UPDATE WAS SUCCESSFUL

DO YOU WANT TO CONTINUE UPDATING? (Y/N)n

Output:

```
mysql> select * from patient;
```

p_id	name	gender	age	address	contact	email
room	bed					
111	klailea	f	18	delhi	234435556	klailea123@gmail.c
14	16					
145	david	m	17	arad	432543476	david@gmail.com
6	8					
546	laila	f	32	isa town	34567789	laila@gmail.com
5	9					
1235	decker	m	24	utah	43356576786	dek@gmail.com
4	5					
1255	chhova	f	22	dhaka	33323232	chooooo@gmail.com
2	3					
12345	faysal	m	18	bahrain	24342354	faysal123@gmail.co
3	7					
123456	ahmed	m	32	hala	43342535	ahmed@gmail.com
4	12					
432532	hayat	f	22	hala	2323232323	hayat@gmail.com
2	3					

SEARCH:

Please choose a service:

1. ADMIN
2. RECEPTION USER
3. SEARCH
4. APPOINTMENT
5. SIGN UP
6. CONTACT US
7. HELP!
8. QUIT

ENTER YOUR CHOICE : 3

1. SEARCH DOCTOR
2. SEARCH PATIENT

ENTER YOUR CHOICE : 1

ENTER THE SEARCHING ELEMENT : faysal

Doctor id = 1888
Patient Name = faysal
Speciality = ent
Gender = m
Age = 18
Contact = 32553432
E-Mail = no email
Room No. = 2

1. SEARCH DOCTOR
2. SEARCH PATIENT

ENTER YOUR CHOICE : 2

ENTER THE SEARCHING VALUE : klailea

Patient Id = 111
Patient Name = klailea
Gender = f
Age = 18
Address = delhi
Contact = 234435556
E-Mail = klailea123@gmail.com
Room No. = 14
Bed No. = 16

Do you want to continue? (Y/N) : n

APPOINTMENT:

Please choose a service:

1. ADMIN
2. RECEPTION USER
3. SEARCH
4. APPOINTMENT
5. SIGN UP
6. CONTACT US
7. HELP!
8. QUIT

ENTER YOUR CHOICE : 4

Patient ID : 4488

Name = chole
Speciality = ENT

Name = haji
Speciality = local doc

Name = ali
Speciality = local doc

Name = faysal
Speciality = ent

Name = ahmed
Speciality = regular

Name = manga
Speciality = regular

Name = manga
Speciality = regular

Name = manga
Speciality = regular

ENTER A DOCTOR'S NAME FROM THE ABOVE LIST WITH WHOM YOU WANT TO BOOK AN APPOINTMENT : chole

Patient Name : faysal mohammed

Patient Gender : m

Patient Age : 33

Patient Address : manama

Patient Contact : 322322

Patient Email : faysal@gmail.com

When do you wish to visit (yyyy-mm-dd) : 2022-03-01

CONGRATULATIONS!!!YOU HAVE SUCCESSFULLY BOOKED AN APPOINTMENT

DO YOU WANT TO TAKE A NEW APPOINTMENT? (Y/N) : n

output:

```
mysql> select * from appointment;
```

p_id	appointment_with_doctor	name	gender	age	address
154	hafi	faysal	m	18	muharraaq
999	faysalnohd03@gmail.com	2021-08-10			
455	ali	faz	m	45	tubli
342516	faxitaxi@gmail.com	2021-05-22			
1232	ali	faysal	m	18	bahrauin
567556456	faysalnohd03@gmail.com	NULL			
2223	chole	faz	m	12	casino
243436566	faz@gmail.com	2222-03-04			
2330	ahmed	waz	m	32	arad
83468238	waz@gmail.com	3333-03-09			
4488	chole	faysal mohammed	m	33	manama
322322	faysal@gmail.com	2022-03-01			

SIGN UP:

Please choose a service:

1. ADMIN
2. RECEPTION USER
3. SEARCH
4. APPOINTMENT
5. SIGN UP
6. CONTACT US
7. HELP!
8. QUIT

ENTER YOUR CHOICE : 5

SIGN UP AS:

1. ADMIN

2. RECEPTIONIST

ENTER YOUR CHOICE : 1

ENTER EXISTING ADMIN's ID : 1234

Password : hello1234

ENTER NEW RECORDS

NEW ADMIN's ID : 1115

Password : hello1115

Confirm Password : hello1115

CHANGES SUCCESSFULLY SAVED!

Output:

```
mysql> select * from admin;
```

user_id	password	admin_authorisation
188	hello188	1999
1111	hello1111	1234
1115	hello1115	1234
1122	hello1122	1234
1234	hello1234	NULL
1236	hello1235	NULL
1999	hello1999	1234

```

SIGN UP AS:
1. ADMIN
2. RECEPTIONIST
ENTER YOUR CHOICE : 2
ENTER EXISTING ADMIN's ID : 1234
Password : hello1234

ENTER NEW RECORDS

NEW RECEPTIONIST's ID : 1188
Password : hello1188
Confirm Password : hello1188
CONGRATULATIONS!!!CHANGES SUCCESSFULLY SAVED!

```

Output:

```

mysql> select * from reception;
+-----+-----+-----+
| user_id | password | admin_authorisation |
+-----+-----+-----+
| 1188 | hello1188 | 1234 |
| 1234 | hello1111 | 1234 |
| 12345 | hello12345 | NULL |
+-----+-----+-----+
3 rows in set (0.00 sec)

```

CONTACT US:

Please choose a service:

1. ADMIN
2. RECEPTION USER
3. SEARCH
4. APPOINTMENT
5. SIGN UP
6. CONTACT US
7. HELP!
8. QUIT

ENTER YOUR CHOICE : 6

ENTER YOUR NAME : faysal

ENTER YOUR CONTACT : 333323344

TYPE YOUR MESSAGE HERE : hello, this is a test run for my project. thanks

SENDING...

SEND SUCCESSFUL

THANK YOU

Do you want to continue contacting us? (Y/N) : n

Output:

```
mysql> select * from messages;
+-----+-----+-----+
| user_name | contact | messages |
+-----+-----+-----+
| faysal | 3322445 | hello faysal. i m a big fn of u.. just kidding...dont |
| be serious | 5534545 | hello |
| gali | 8893253 | i will kill logan paul. |
| hasbullah | 9865434 | i m loki of asgard |
| loki | 23233434 | hello world |
| faysal | 43343435 | i like it |
| faysal | 333323344 | hello, this is a test run for my project. thanks |
| faysl | 333329292 | hello there |
| faysal | 333444555 | bye world |
| haji | 534436687 | hi |
+-----+-----+-----+
```

HELP! :

Please choose a service:

1. ADMIN
2. RECEPTION USER
3. SEARCH
4. APPOINTMENT
5. SIGN UP
6. CONTACT US
7. HELP!
8. QUIT

ENTER YOUR CHOICE : 7

Hello there. Welcome to BAHBAI HOSPITAL MANAGEMENT SYSTEM. Here we do task like:

A quick walk-through the application:

When you open this application, you will be directed to the main screen. From there you will get various options. You need to select the option that provides the service you are looking for with BAHBAI HOSPITAL MANAGEMENT SYSTEM. Also you will be provided with an input box. Select an option in NUMBER
After selecting an option of your choice, if you choose log in options (OPTION 1 AND 2), you will be asked to enter user id and password to further proceed.

Option 3. SEARCH is open to all users. In it, you can search a patient or a doctor.

Option 4. appointment is for booking an appointment with any doctor of your choice.

Option 5. SIGN UP is a function in which you can sign up for ADMIN OR RECEPTIONIST.

NOTE: OPTION 5. SIGN UP requires an admin's access for further processing.

i.e. you will need an existing admin's user id and password to sign up.

OPTION 6. is for contacting us. You can write a re-view for us or any question regarding medical purposes.

OPTION 7. is this service going-on

OPTION 8. is for quitting the program and leaving this site.

ANY MORE ASSISTANCE CAN BE PROVIDED BY OPTION 6. FEEL FREE TO USE IT.

THANK YOU!

QUIT:

ENTER YOUR MYSQL PASSWORD : faysal

connecting...
connection successful

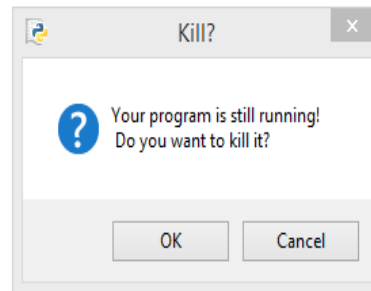
DATABASE EXIST

```
*****  
***.....**  
**....WELCOME TO AL BAHBAI HOSPITAL....**  
***.....**  
*****
```

Please choose a service:

1. ADMIN
2. RECEPTION USER
3. SEARCH
4. APPOINTMENT
5. SIGN UP
6. CONTACT US
7. HELP!
8. QUIT

ENTER YOUR CHOICE : 8



8. CONCLUSION

This software has its advantages and disadvantages but it can surely help with the storage system. We don't have to worry about the misplacing of records which is a great clash while storing the record on separate files.

For hospitals having their own site, appointment widgets will be integrated onto the site. Patients visiting the hospital's website can book online appointments with ease. This electronic-based medical record system can be viewed as a patient's health chart. It retrieves information based on the patient's name or medical record number or the physician's record number. The patient data can be kept a hundred percent safe by using BHMS in your hospital. It can be made accessible by only a limited amount of authorized personnel. Bahbai Hospital Management System (BHMS) improves the visibility and transparency in the complete management process and in all records. It helps in streamlining the accurate reporting with the help of updated and accurate records. Bahbai Hospital Management System makes it easy to get access to the management system facilities for the authorized users and keep it safe from unauthorized users.

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