

# IITI-HEALTH

## PROJECT-DISCRPTION:

The specialities of this project

### **Patient's view:**

- A patient can book appointment
- A patient can view doctor's profile
- A patient can update and view his/her personal data
- A patient can book to donate blood and(or) plasma
- A patient can view all his previous and current appointments and the status of appointment

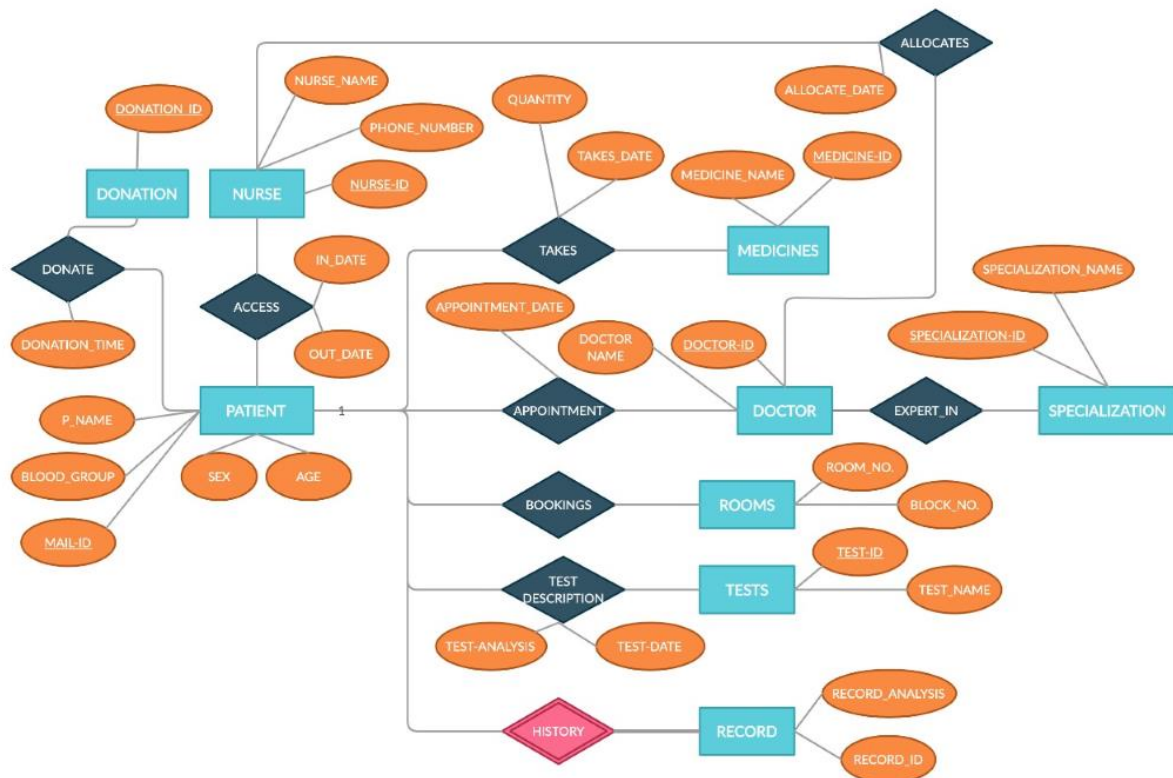
### **Receptionist view:**

- Receptionist can update records of patient after the consultancy.
- Receptionist can update medicines of patient after the consultancy.
- Receptionist can update tests of patient after the consultancy.
- Receptionist can update allocate rooms (if emergency) to patient after the consultancy.
- A receptionist can view all appointments on a particular day
- A receptionist can update and view his/her personal data
- A receptionist can view and update doctor's information
- A receptionist can view and update nurse information

### **Doctors view:**

- A doctor can view patient's previous medical records
- A doctor can allocate nurse to particular patient
- A doctor can update and view his information

## ER-DIAGRAM:



## SCHEMA:

**Patient**(P\_name,mail\_id,age,sex,blood\_group,password);

→ Primary\_key(mail\_id)

**Medicines**(medicine\_id,medicine\_name);

→ Primary\_key(Medicine\_id)

**Takes**(mail\_id,medicine\_id,takes\_date,quantity);

→ Primary\_key=mail\_id,medicine\_id,takes\_date

→ foreign key (medicine\_id) references medicines(medicine\_id),

→ foreign key (mail\_id) references patient(mail\_id)

**Appointment**(mail\_id,date\_appointment,doctor\_id);

→ primary key(mail\_id,date\_appointment,doctor\_id),

→ foreign key (mail\_id) references patient(mail\_id),

→ foreign key(doctor\_id) references doctor(doctor\_id)

**Doctor**(doctor\_id,doctor\_name,availabilitypassword);

→ primary key (doctor\_id)

**Specialization**(spec\_id,spec\_name);

→ primary key(spec\_id)

**Expert\_in**(doctor\_id,spec\_id);

- primary key(doctor\_id,spec\_id),
- foreign key(doctor\_id )references doctor(doctor\_id),
- foreign key(spec\_id) references specialization(spec\_id)

**Donation**(donation\_id,donation\_type);

- primary key(donation\_id)

**Donate**(mail\_id,doantion\_type);

- primary key(mail\_id,donation\_date,donation\_id),
- foreign key (mail\_id) references patient(mail\_id),
- foreign key (donation\_id) references donation(donation\_id)

**Nurse**(nurse\_id,nurse\_name,phone\_number);

- primary key (nurse\_id)

**allocate**(mail\_id,record\_id,description);

- Primary key(mail\_id,record\_id)
- foreign key(mail\_id) references patient(mail\_id)
- Foreign key(record\_id)references Record(record\_id)

**Receptionist**(receptionist\_id,receptionist\_name,password);

- Primary\_key(receptionist\_id)

**Tests**(test\_id,test\_name);

- primary key(test\_id)

**Record**(mail\_id,record\_id,record\_analysis);

- primary key(mail\_id,record\_id),
- foreign key(mail\_id) references patient(mail\_id)

**Test\_discription**(mail\_id,test\_date,test\_analysis);

- primary key(mail\_id,test\_id,test\_date),
- foreign key(test\_id) references tests(test\_id),
- foreign key(mail\_id) references patient(mail\_id)

**History**(mail\_id,record\_analysis);

- Primary key(mail\_id,record\_analysis)
- foreign key(mail\_id) references patient(mail\_id)

**Rooms**(room\_id,block\_id);

- Primary key(room\_id,block\_id)

**Nursealloc**(nurse\_id,mail\_id,doctor\_id,date\_in,date\_out):

- Primary key(mail\_id,date\_in)
- foreign key (mail\_id) references patient(mail\_id),
- Foreign key(nurse\_id)references nurse(nurse\_id)
- Foreign key(doctor\_id)references doctor(doctor\_id)

**Bookings**(room\_id,block\_id,date\_bokking);

- primary key(mail\_id,date\_in),
- foreign key (mail\_id) references patient(mail\_id),
- foreign key(room\_no,block\_no) references rooms(room\_no,block\_no)

## TECHNOLOGY/SOFTWARE'S USED:

- Html
- CSS
- Python
- Flask
- My-SQL

## Source code:

<https://github.com/nunemunthalashiva/hospital-database-management-system>

## My databases:

Execute:

> select \* from patient

```
+-----+-----+-----+-----+-----+
| mail_id | P_name | age | blood_group | sex |
+-----+-----+-----+-----+-----+
| a1@iiti.ac.in | john | 22 | O+ | M |
| a2@iiti.ac.in | sudarsan | 21 | B+ | M |
| a3@iiti.ac.in | pranavi | 20 | O+ | F |
| a4@iiti.ac.in | shiva | 18 | O+ | M |
| a5@iiti.ac.in | jagadesh | 19 | AB+ | M |
| a6@iiti.ac.in | hritikesh | 20 | B+ | M |
| a7@iiti.ac.in | sashi | 20 | A+ | M |
| a8@iiti.ac.in | aniketh | 21 | O+ | M |
```

|               |          |      |      |      |
|---------------|----------|------|------|------|
| a9@iiti.ac.in | sharanya | 19   | O+   | F    |
| NULL          | NULL     | NULL | NULL | NULL |

10 rows

Execute:

> select \* from appointment

| mail_id       | date_appointment | doctor_id |
|---------------|------------------|-----------|
| a1@iiti.ac.in | 2020-08-11       | 300000    |
| a1@iiti.ac.in | 2020-11-08       | 300000    |
| a1@iiti.ac.in | 2020-11-08       | 300003    |
| a2@iiti.ac.in | 2020-09-14       | 300004    |
| a5@iiti.ac.in | 2020-11-08       | 300004    |
| a3@iiti.ac.in | 2020-09-22       | 300006    |
| a4@iiti.ac.in | 2020-09-23       | 300007    |
| NULL          | NULL             | NULL      |

8 rows

Execute:

> select \* from doctor

| doctor_id | doctor_name | available_date |
|-----------|-------------|----------------|
| 300000    | pranavi     | 2020-11-12     |

|        |                    |            |  |
|--------|--------------------|------------|--|
| 300001 | steve              | 2020-09-12 |  |
| 300003 | pranavi            | 2020-11-14 |  |
| 300004 | rebecca            | 2020-10-12 |  |
| 300005 | adam               | 2020-11-08 |  |
| 300006 | fehlna             | 2020-10-12 |  |
| 300007 | ramaswamy ganeshan | 2020-11-21 |  |
| 300008 | keerthi suresh     | 2020-12-12 |  |
| 300009 | john cena          | 2020-08-12 |  |
| NULL   | NULL               | NULL       |  |

+ ----- + ----- + ----- +

10 rows

Execute:

> select \* from donate

|               |             |               |  |
|---------------|-------------|---------------|--|
| mail_id       | donation_id | donation_date |  |
| a1@iiti.ac.in | 500000      | 2020-11-11    |  |
| a5@iiti.ac.in | 500000      | 2019-11-11    |  |
| a1@iiti.ac.in | 500001      | 2020-11-11    |  |
| a3@iiti.ac.in | 500002      | 2020-09-09    |  |
| NULL          | NULL        | NULL          |  |

+ ----- + ----- + ----- +

5 rows

Execute:

> select \* from donation

```

+ -----+ + -----+
| donation_id | donation_type |
+ -----+ + -----+
| 500000      | blood donation |
| 500001      | plasma donation |
| 500002      | kidney donation |
| NULL        | NULL           |
+ -----+ + -----+
4 rows

```

Execute:

```
> select * FROM expert_in
```

```

+ -----+ + -----+
| doctor_id   | spec_id   |
+ -----+ + -----+
| 300000      | 200000    |
| 300001      | 200000    |
| 300000      | 200001    |
| 300008      | 200003    |
| 300008      | 200004    |
| 300007      | 200006    |
| 300005      | 200007    |
| 300007      | 200007    |
| NULL        | NULL      |
+ -----+ + -----+
9 rows

```

Execute:

```
> select * from medicines
```

```
+ ----- + ----- +  
| medicine_id | medicine_name |  
+ ----- + ----- +  
| 100000      | paracetmol    |  
| 100001      | antihistamines|  
| 100003      | antacids      |  
| 100004      | fabiflu       |  
| 100005      | erythromycin  |  
| 100006      | vitamin B     |  
| 100007      | citrogen      |  
| 100008      | calcium       |  
| NULL        | NULL          |  
+ ----- + ----- +
```

9 rows

Execute:

```
> select * from nurse
```

```
+ ----- + ----- + ----- +  
| nurse_id   | nurse_name    | phone_number |  
+ ----- + ----- + ----- +  
| 400000     | catalina      | 9247775899   |  
| 400001     | siri          | 9246665899   |  
| 400002     | loogle        | 9245555899   |  
| 400003     | cortana       | 9244445899   |  
| 400004     | sharanya      | 9241115899   |  
| 400005     | peter         | 9274775899   |
```



|         |             |            |   |
|---------|-------------|------------|---|
| 400006  | nivin pauly | 9249975899 |   |
| 400007  | randomguy   | 9247775999 |   |
| NULL    | NULL        | NULL       |   |
| + ----- | + -----     | + -----    | + |

9 rows

Execute:

> select \* from nursealloc

|           |          |               |            |            |   |
|-----------|----------|---------------|------------|------------|---|
| + -----   | + -----  | + -----       | + -----    | + -----    | + |
| doctor_id | nurse_id | mail_id       | date_in    | date_out   |   |
| + -----   | + -----  | + -----       | + -----    | + -----    | + |
| 300000    | 400000   | a1@iiti.ac.in | 2019-09-11 | 2019-09-13 |   |
| 300000    | 400000   | a1@iiti.ac.in | 2020-09-11 | 2020-09-13 |   |
| 300000    | 400000   | a2@iiti.ac.in | 2020-08-14 | 2020-09-13 |   |
| 300003    | 400005   | a4@iiti.ac.in | 2020-08-09 | 2020-08-14 |   |
| 300001    | 400003   | a5@iiti.ac.in | 2020-07-14 | 2020-07-17 |   |
| NULL      | NULL     | NULL          | NULL       | NULL       |   |
| + -----   | + -----  | + -----       | + -----    | + -----    | + |

6 rows

Execute:

> select \* from record

|               |           |                         |   |
|---------------|-----------|-------------------------|---|
| + -----       | + -----   | + -----                 | + |
| mail_id       | record_id | record_analysis         |   |
| + -----       | + -----   | + -----                 | + |
| a1@iiti.ac.in | 100       | he got headache bla bla |   |
|               |           | bla bla bla ....        |   |

|                           |                            |
|---------------------------|----------------------------|
| a1@iiti.ac.in   101       | he got stomachache bla bla |
| bla bla bla ....          |                            |
| a4@iiti.ac.in   100       | bla bla                    |
| bla bla bla ....          |                            |
| a4@iiti.ac.in   102       | he got headache bla bla    |
| bla bla bla ....          |                            |
| a6@iiti.ac.in   104       | bla bla                    |
| bla bla bla ....          |                            |
| NULL   NULL               | NULL                       |
| + ----- + ----- + ----- + |                            |

6 rows

Execute:

> select \* from rooms

|                    |
|--------------------|
| + ----- + ----- +  |
| room_no   block_no |
| + ----- + ----- +  |
| 101a   bose        |
| 101a   kalam       |
| 101b   bose        |
| 101b   kalam       |
| 303   steve        |
| 505   shivan       |
| NULL   NULL        |
| + ----- + ----- +  |

7 rows

Execute:

```
> select * from specialization
```

```
+-----+-----+
| spec_id | spec_name |
+-----+-----+
| 200000  | pediatrician |
| 200001  | obstetrician |
| 200002  | surgeon      |
| 200003  | psychiatrist |
| 200004  | cardiologist |
| 200005  | dermatologist |
| 200006  | nephrologist |
| 200007  | ophthalmologist |
| NULL    | NULL        |
+-----+-----+
```

9 rows

Execute:

```
> select * from takes
```

```
+-----+-----+-----+-----+
| mail_id | medicine_id | quantity | takes_date |
+-----+-----+-----+-----+
| a1@iiti.ac.in | 100000      | 5        | 2019-07-11 |
| a1@iiti.ac.in | 100004      | 3        | 2019-07-11 |
| a1@iiti.ac.in | 100005      | 7        | 2019-07-19 |
| a2@iiti.ac.in | 100008      | 20       | 2020-06-11 |
| a3@iiti.ac.in | 100007      | 5        | 2019-09-11 |
| a4@iiti.ac.in | 100001      | 6        | 2019-11-11 |
```

|               |        |      |            |
|---------------|--------|------|------------|
| a4@iiti.ac.in | 100003 | 1    | 2019-11-11 |
| NULL          | NULL   | NULL | NULL       |

8 rows

Execute:

> select \* from test\_descrp

| mail_id       | test_id | test_date  | test_analysis   |
|---------------|---------|------------|---|
| a2@iiti.ac.in | 600000  | 2020-09-11 | bla bla bla ....<br>bla bla bla .... bla bla bla .... |
| a2@iiti.ac.in | 600002  | 2020-08-11 | bla bla bla ....<br>bla bla bla .... bla bla bla .... |
| a3@iiti.ac.in | 600001  | 2020-11-11 | bla bla bla ....<br>bla bla bla .... bla bla bla .... |
| a4@iiti.ac.in | 600004  | 2019-09-11 | bla bla bla ....<br>bla bla bla .... bla bla bla .... |
| a5@iiti.ac.in | 600006  | 2020-08-15 | bla bla bla ....<br>bla bla bla .... bla bla bla .... |
| NULL          | NULL    | NULL       | NULL  |

6 rows

Execute:

> select \* from tests

|  |  |
|--|--|
|  |  |
|--|--|

| test_id | test_name     |
|---------|---------------|
| 600000  | blood test    |
| 600001  | urine test    |
| 600002  | X ray         |
| 600003  | MRI scan      |
| 600004  | diabetic test |
| 600005  | HIV test      |
| 600006  | covid19 test  |
| 600007  | wbc test      |
| NULL    | NULL          |

9 rows

Execute:

> select \* from receptionist

| mail_id        | passwd         | receptionist_name |
|----------------|----------------|-------------------|
| recep1@iiti.ac | recep1@iiti.ac | ranavip           |

1 rows

## SCREENSHOTS OF WEB-PAGES:

Our project has three different views:

Patient, receptionist and doctor:

The very first page:

It contains login button with three drop-down menu options

That will take to three login pages based on user.



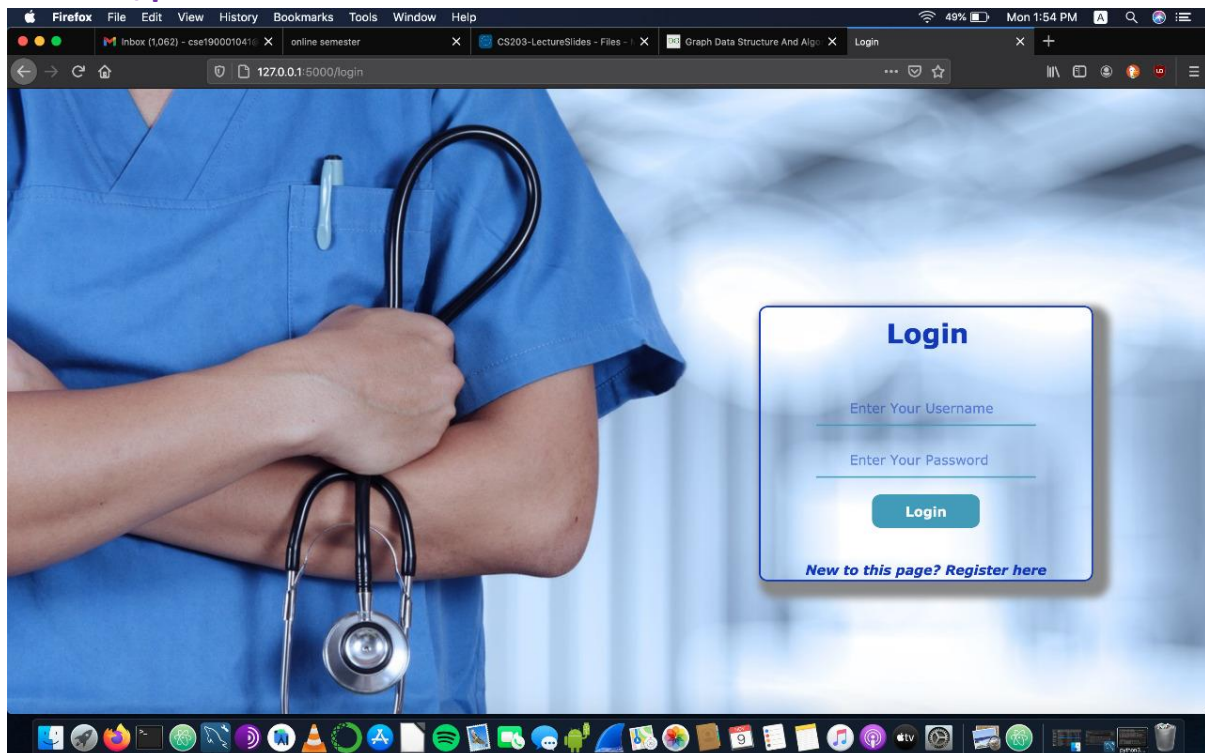
Patient's view:

This is patient login:

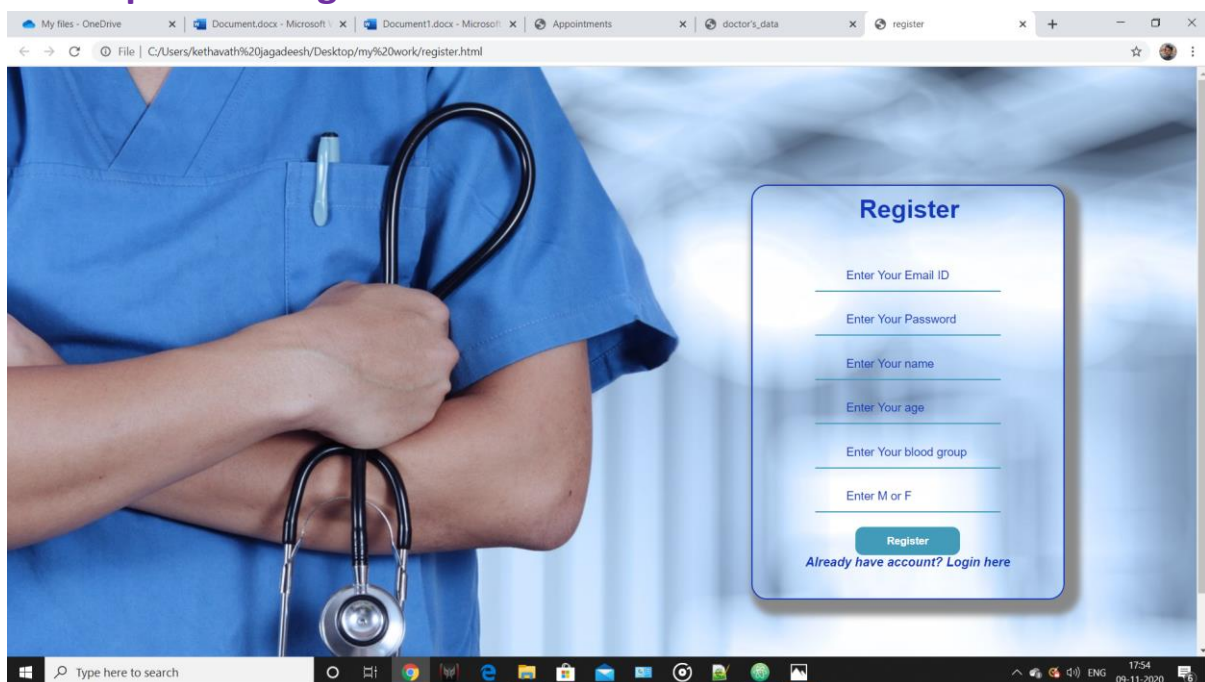
It also contains register

If the user is new then he has to register first

If he enters invalid email or password then he gets a message as invalid email-id/password



This is patients register form:

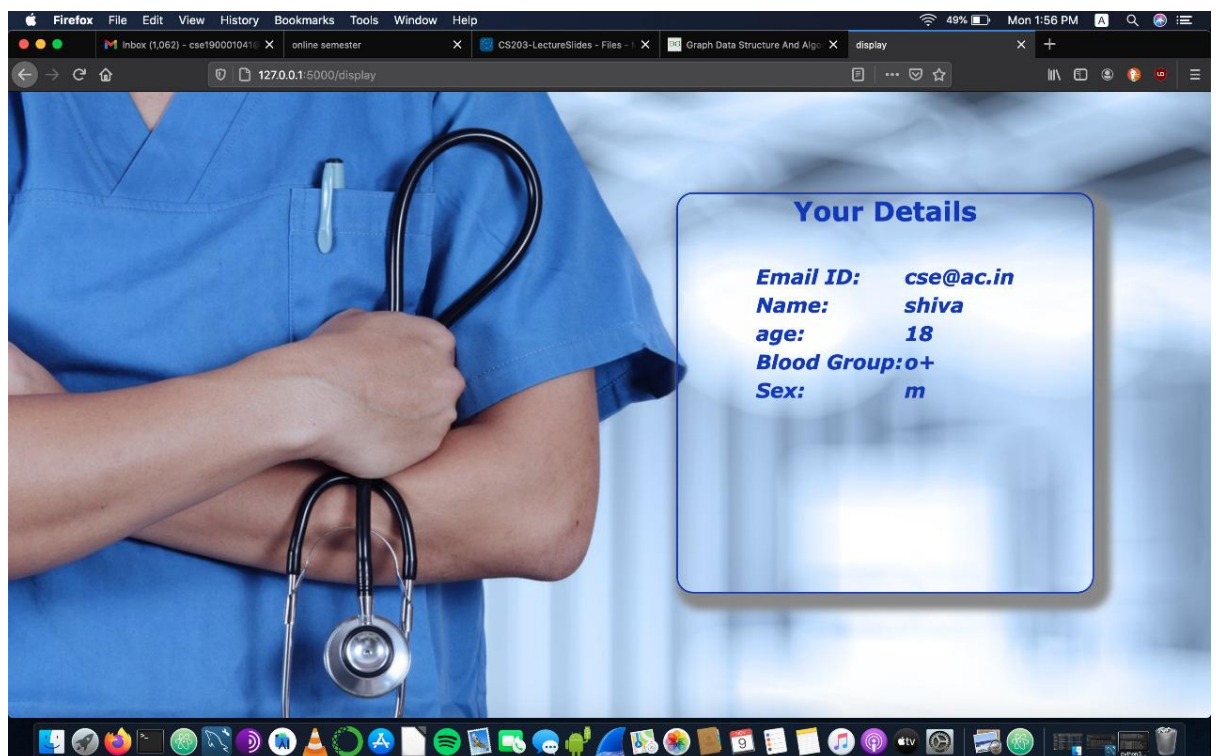


Patients homepage:

He can find options like my account, records, donation, make an appointment, my appointments, whereas this drop-down menu contains three different option shown here

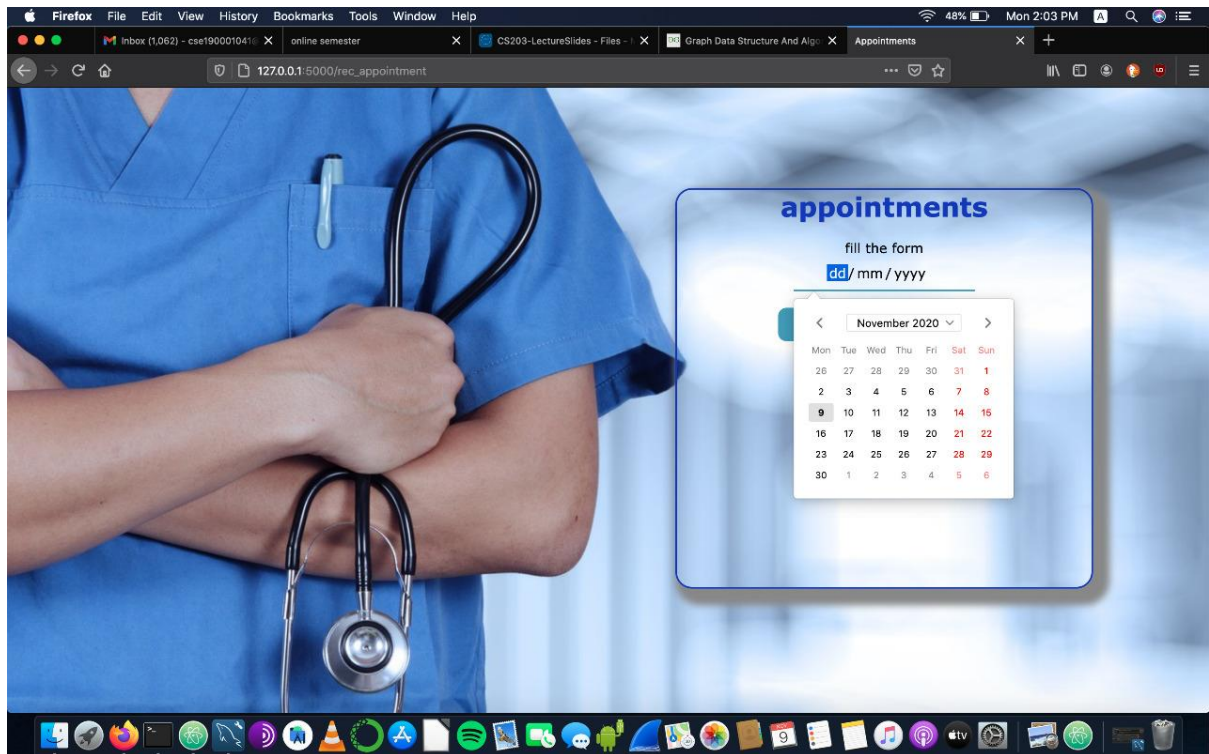


Upon clicking my account->display: it displays personal info

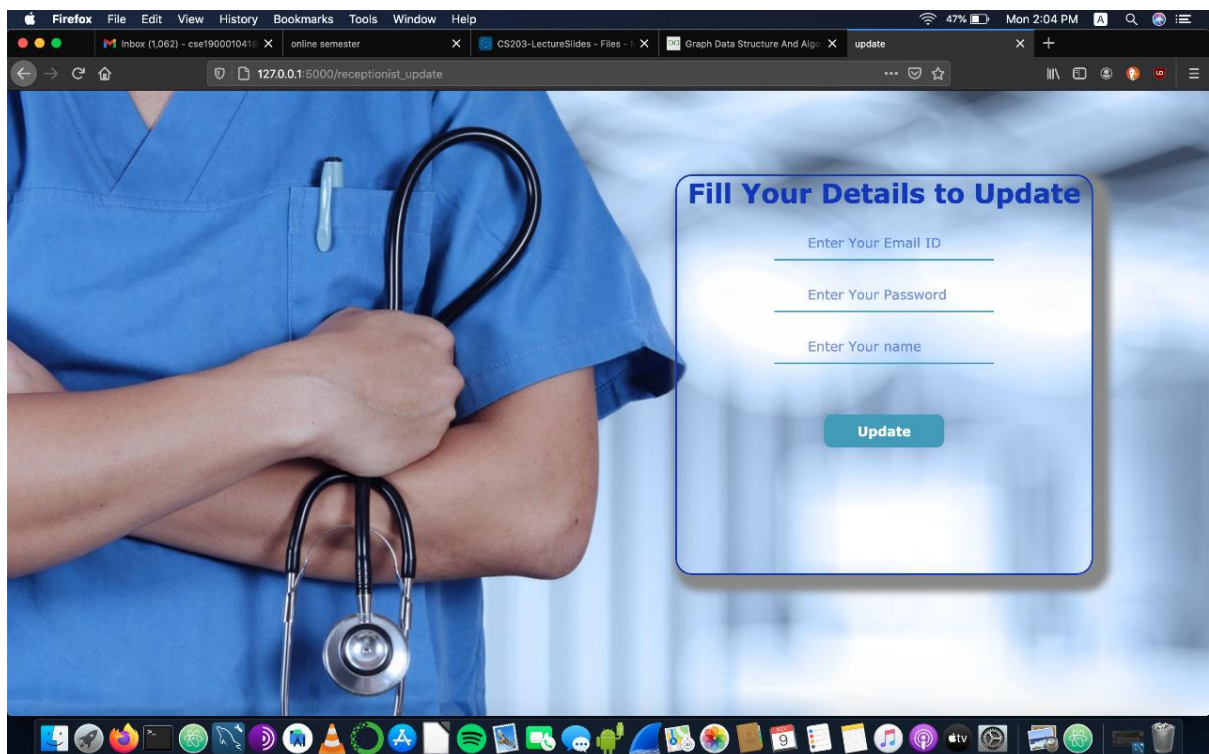


Upon clicking make an appointment: patient can make an appointment here





Upon clicking my account\_>update: patient can update personal info



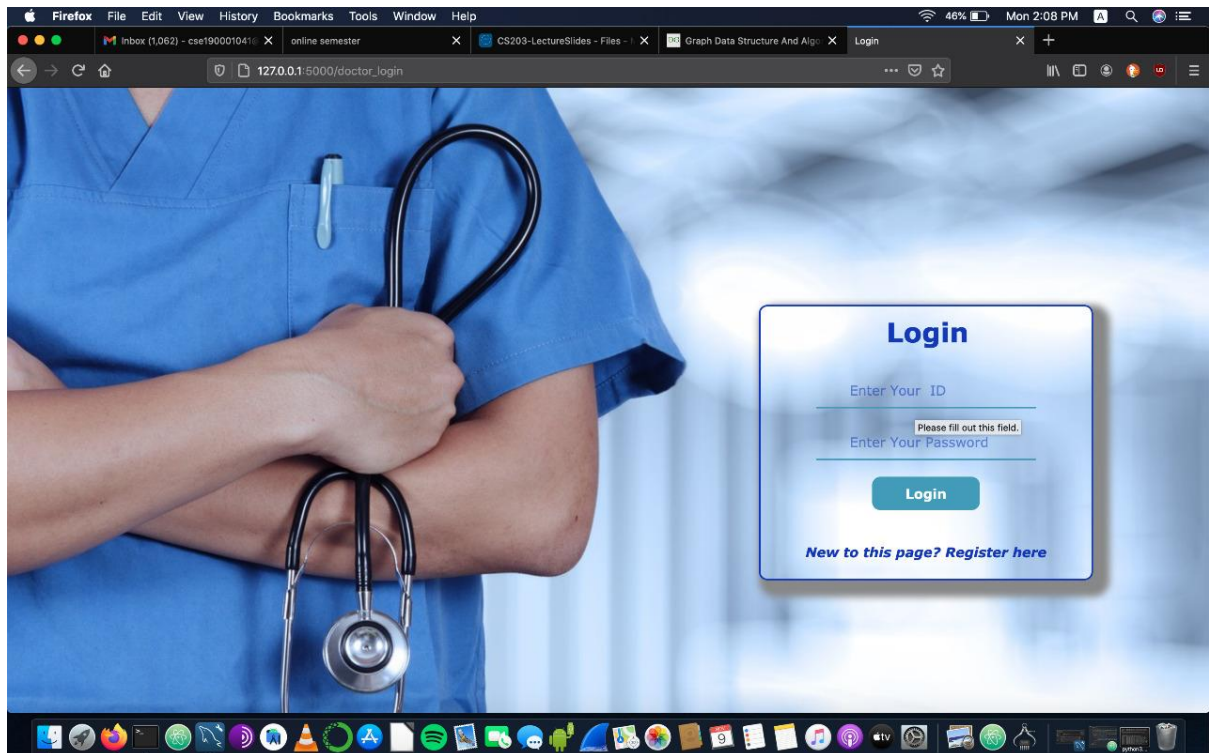
receptionist view:

This is receptionist login:

It also contains register

If the user is new then he has to register first

If he enters invalid email or password then he gets a message as invalid email-id/password



## This is receptionist register form:

My files - OneDrive | Document.docx | Document1.docx | Appointments | doctor's\_data | register | register | register

File | C:/Users/kethavath%20jagadeesh/Desktop/my%20work/receptionist\_register.html

**Register**

{{ msg }}

Enter Your Email ID

Enter Your Password

Enter Your name

**Register**

*Already have account? [Login here](#)*

Type here to search

18:10 09-11-2020

## Homepage of receptionist:

It contains allocate room, update record, update tests, medicines, appointments, update nurse info options.

Firefox | File | Edit | View | History | Bookmarks | Tools | Window | Help

Inbox (1,062) | cse190001041 | online semester | CS203-LectureSlides - Files | Graph Data Structure And Algo | IITI-HEALTH

127.0.0.1:5000/receptionist\_login

**IITI-HEALTH**

medicines | update-tests | allocate\_rooms | update-record | Appointments | **My account** | Logged in successfully!

Display

Update

Logout

**Making Health Care Better Together**

Also you dry creeping beast multiply fourth abundantly our itset signs bring our; Won form living. Whose dry you seasons divide given gathering great in whose you'll greater let livein form beast sinthete better together these place absolute right.

**update-nurse\_info**

127.0.0.1:5000/receptionist\_login#



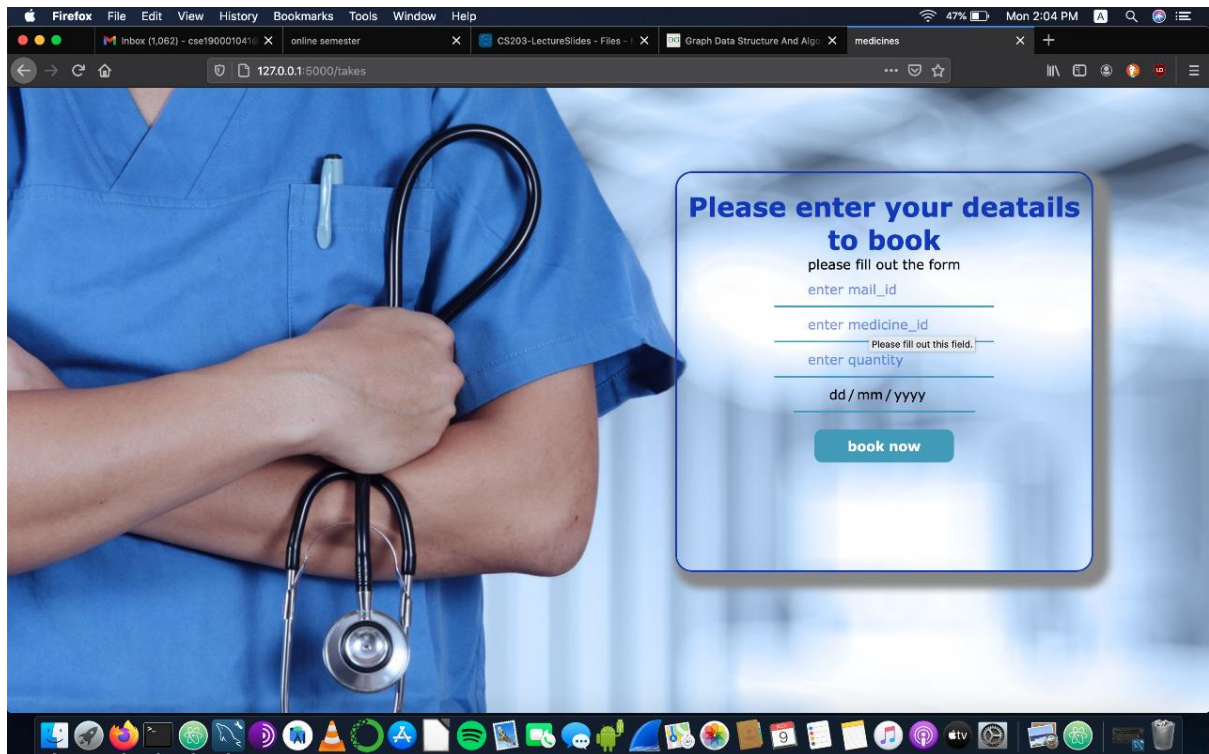
Upon clicking update- nurse\_info: receptionist can update nurse personal info

The screenshot shows a web browser window with the address bar displaying '127.0.0.1:5000/nurse\_info'. The page features a background image of a nurse in blue scrubs with a stethoscope. On the right side, there is a white box with a blue border titled 'Fill nurse Details to Update'. Inside this box, there are three input fields labeled 'enter nurse\_id', 'enter nurse\_name', and 'enter phone\_no'. Below these fields is a blue button labeled 'register'.

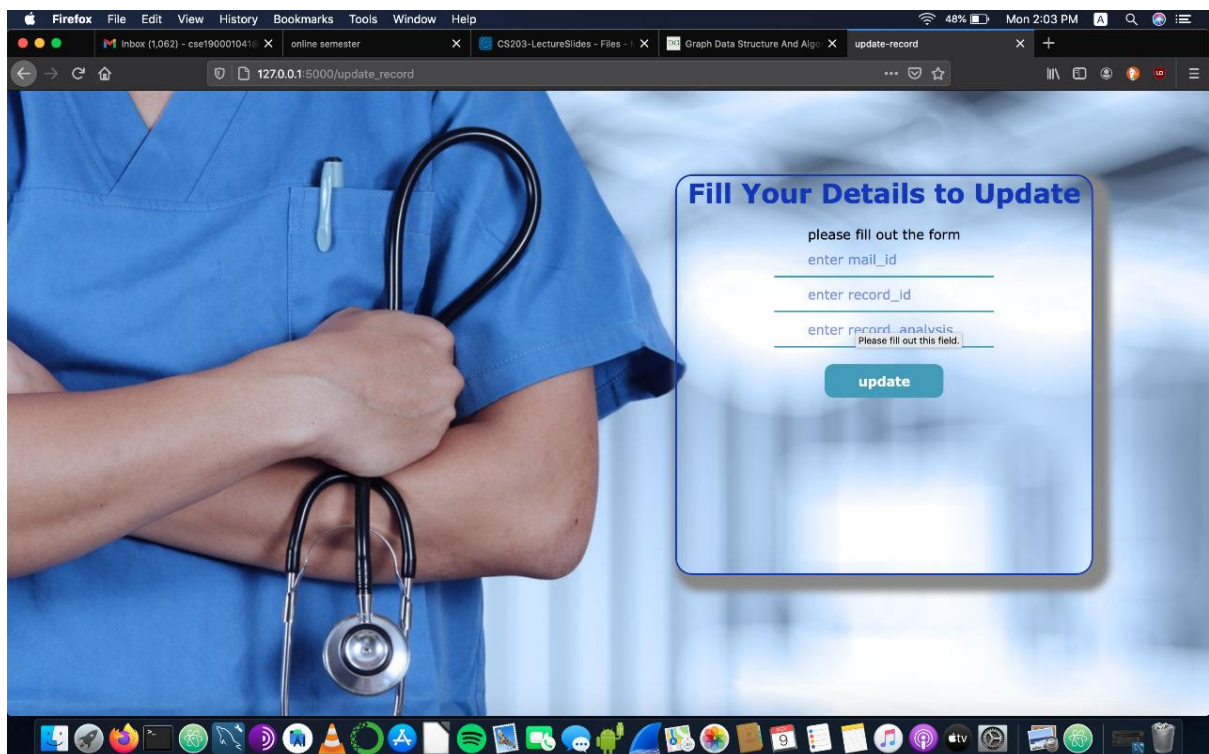
Upon clicking my accounts->display: it views receptionist personal info

The screenshot shows a web browser window with the address bar displaying '127.0.0.1:5000/receptionist\_display'. The page features the same background image of a nurse in blue scrubs with a stethoscope. On the right side, there is a white box with a blue border titled 'Your Details'. Inside this box, the text displays 'Email ID:recep1@iti.ac' and 'Name: ranavip'.

Upon clicking medicines: it is to update the medicine information of patients



Upon clicking update records: receptionist fills this form to update record of patients after consultancy.



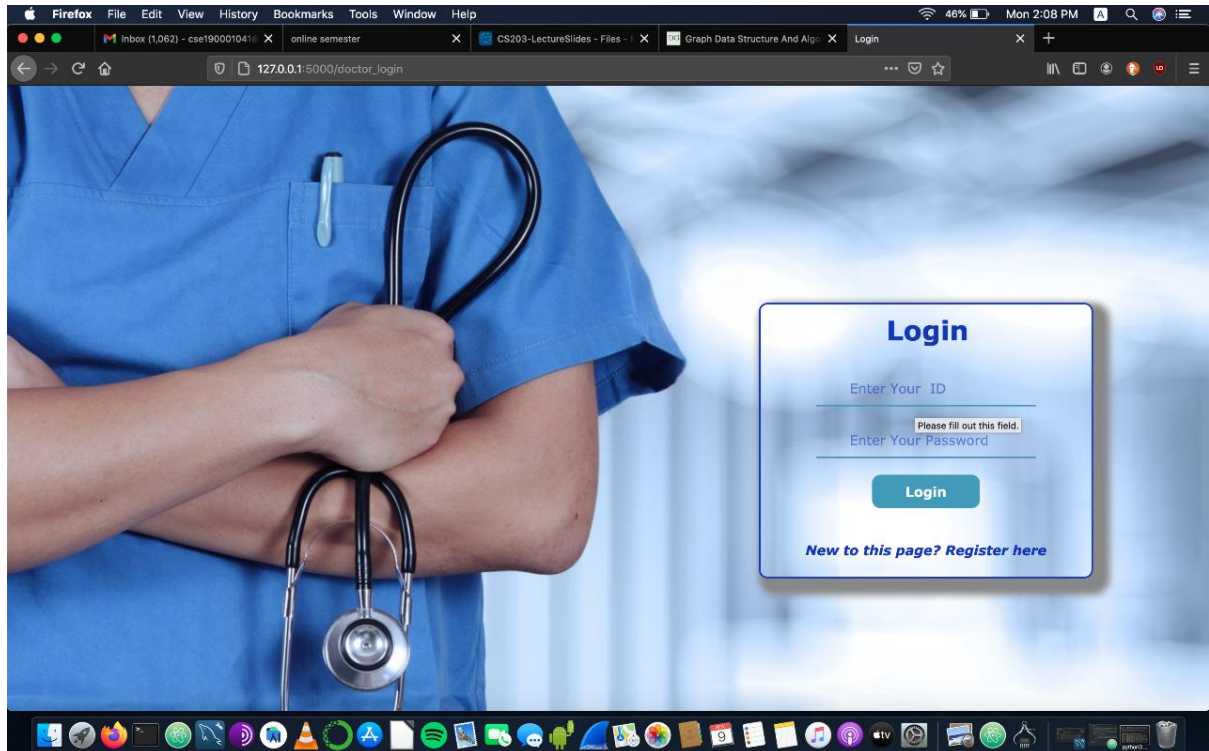
Doctor's view:  
This is doctors login:



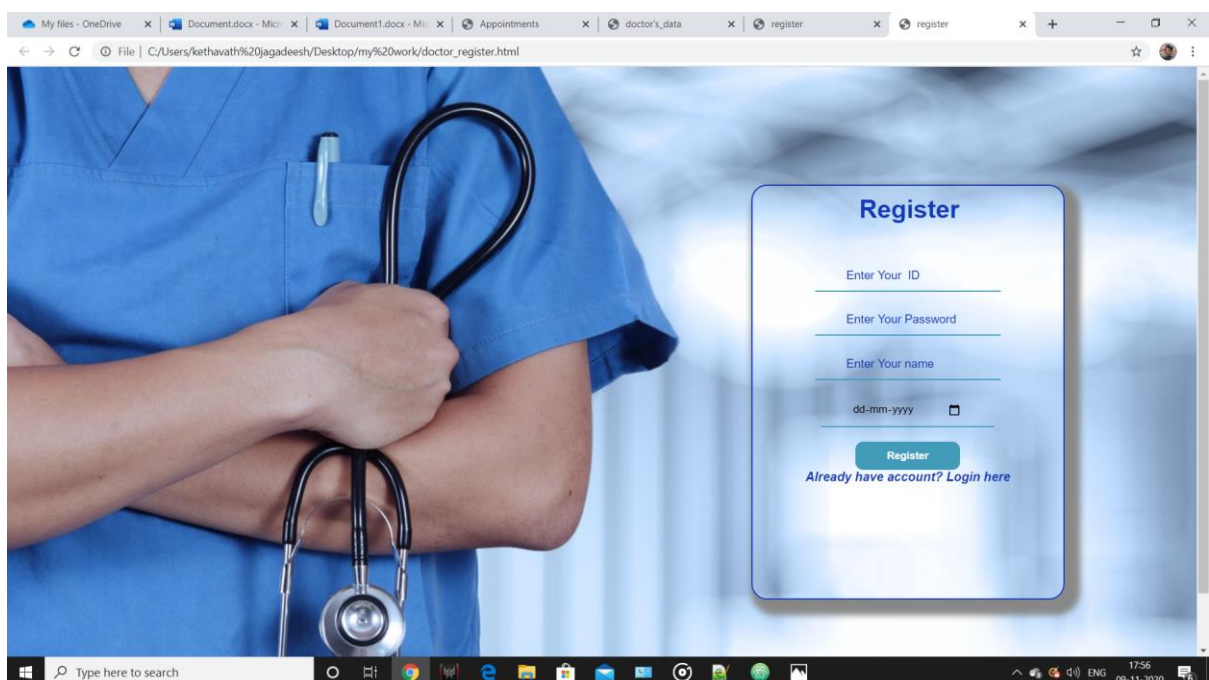
It also contains register

If the user is new then he has to register first

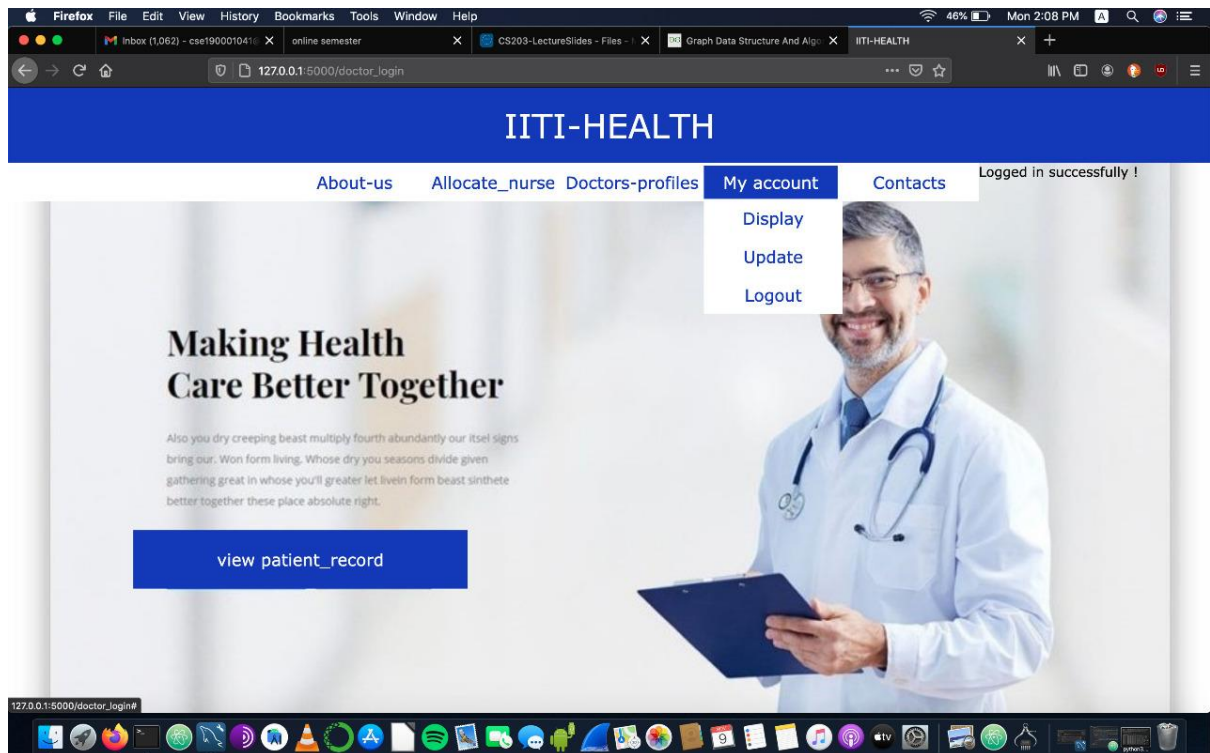
If he enters invalid email or password then he gets a message as invalid email-id/password



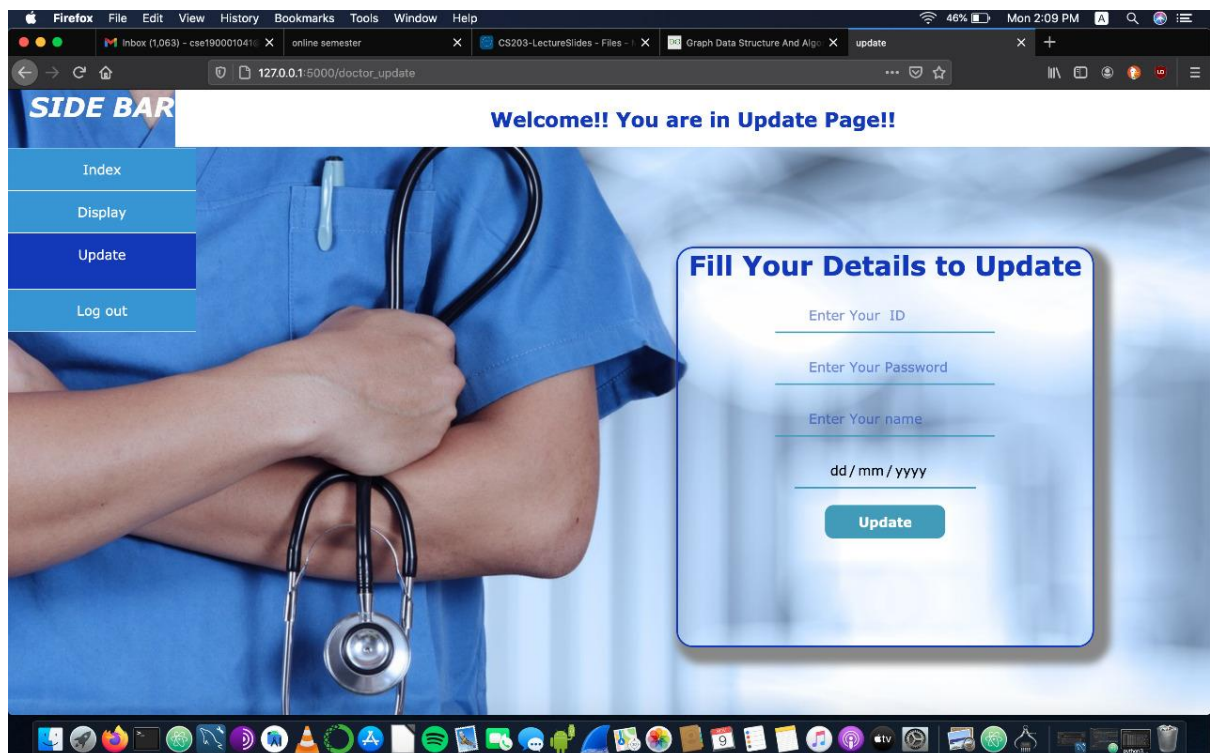
This is doctors register form:



This is doctors home page: it contains allocate nurse doctors profile my account contacts information

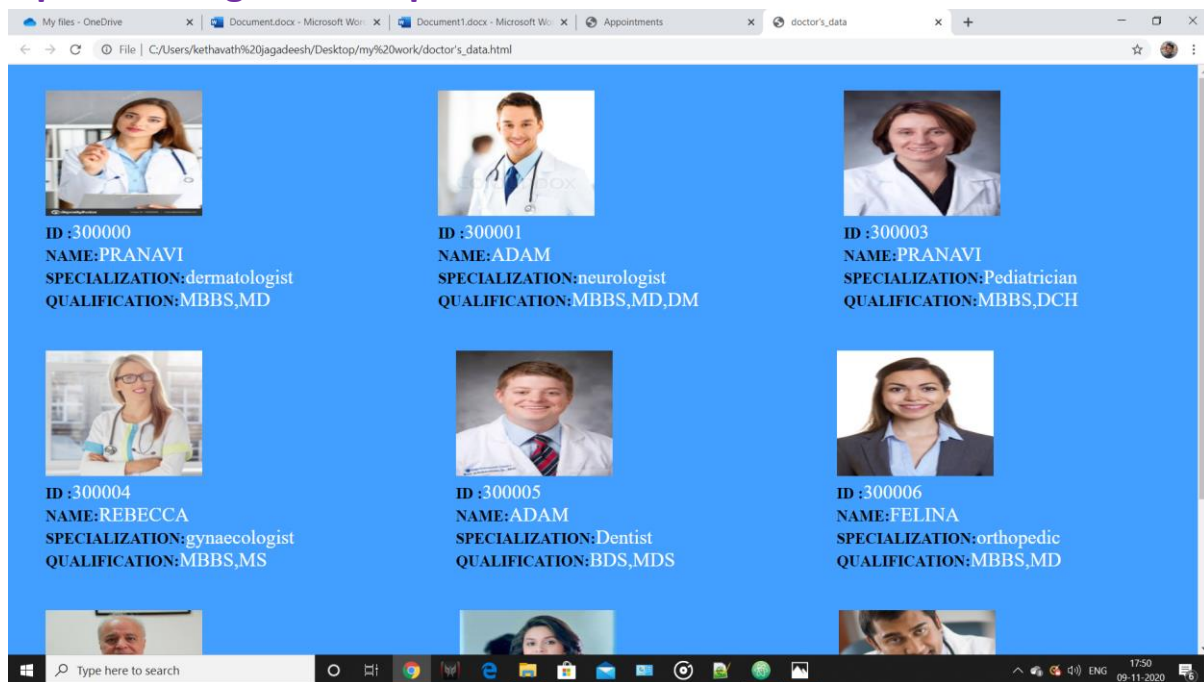


On clicking my accounts->update: a doctor can update his/her information

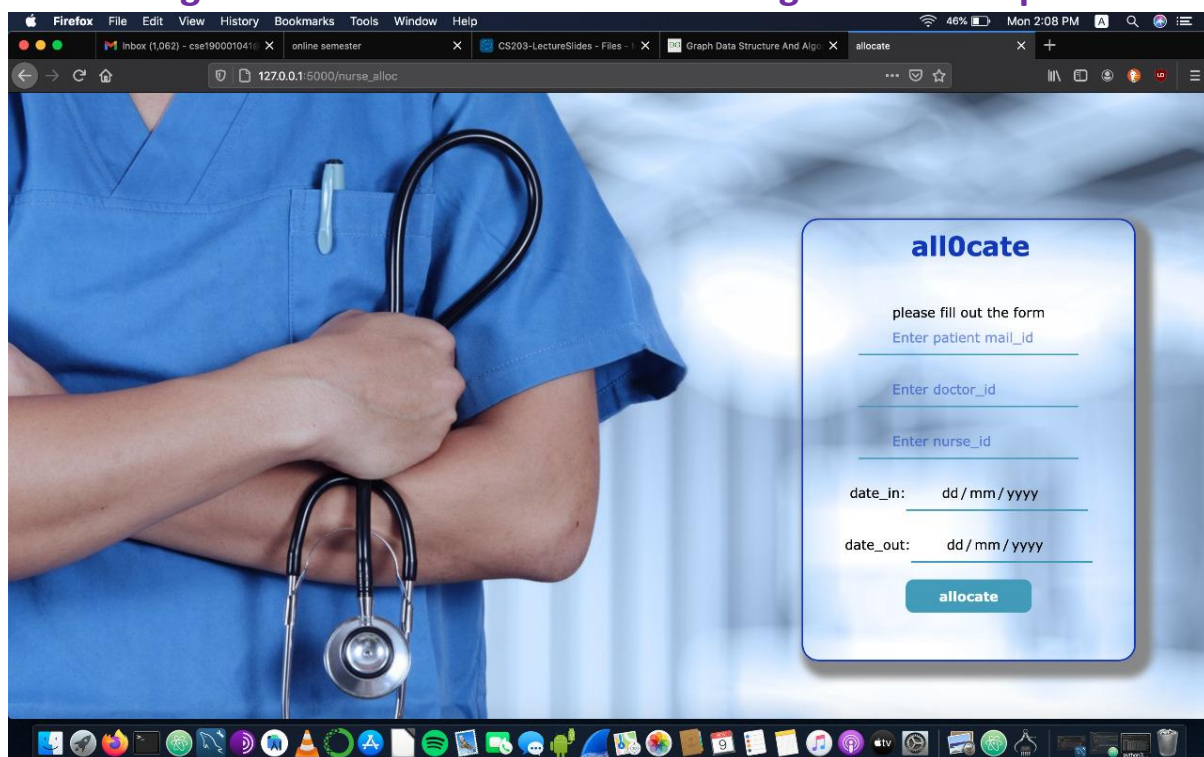




## Upon clicking doctor's profile: Raw data of doctors

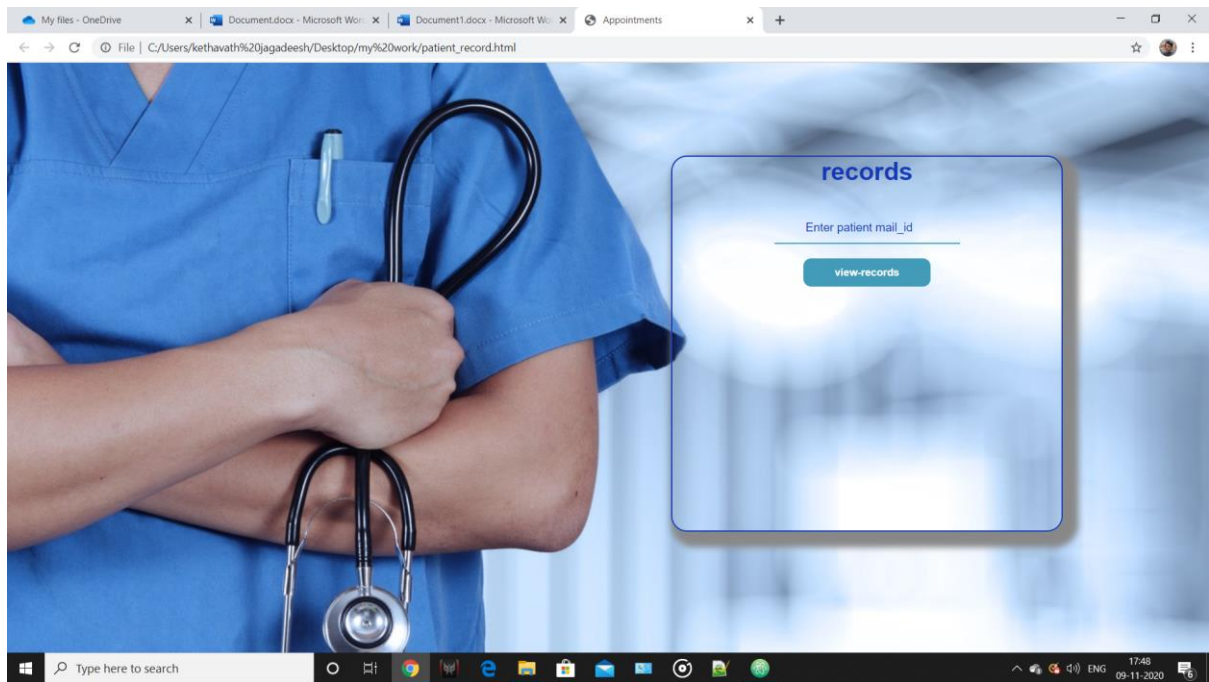


## On clicking allocate nurse: A doctor can assign a nurse to patient



## On clicking view patients record: doctor can able to see patients previous medical records





## CONTRIBUTION OF EACH MEMBER:

**SHIVA (190001041)**->backend for patient's view and receptionist view, front end for doctor's view, er diagram. (did some changes in front end of patient and receptionist view)

**JAGADEESH (190001024)**-> backend for doctor's view and front end for patient and receptionist view, er-diagram. (did some changes in backend for patient and receptionist view)

**HRITIKESH (190002014)**->er diagram, frontend for allocate nurse

**Sashikumar (190001055)**->frontend for patient records,er-diagram

**Aniketh-Sethi (190001003)**: frontend for doctor's login page.

**Shiva** and **Jagadeesh** both created databases and inseted needed values in it.