Project Name : Doctor's Appointment System
Branch PG-DAC MARCH-2023

Documentation On

"DOCTOR'S APPOINTMENT SYSTEM"
PG-DAC MARCH-2023

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1. Introduction:

1.1 Document Purpose:

This document communicates the business requirements and scope for developing Doctor's Appointment System. The scope of this document is to define the functional and non functional requirements, business rules and other constraints requirements.

1.2 Project Background:

In pandemic, one of the main things the whole world has understood is power of internet. Generally there is a large development of information in medical facility on a daily basis. Each manually operated administration concerning these records can result in a bunch of glitches which will also spend time, funds as well as initiatives. Additionally the medical facility can receive information after a long waiting and processing policies. This particular project will eliminate such kind of errors and long waiting process. This particular project helps to save efforts, funds and also work..

1.3 Aim & Objectives:

The aim of this system is building a website which will reduce waiting time & crowding of patients at hospital. The main objective of the Doctor's Appointment System is to manage the details of Doctor, patient, test, booking number. Proper management of the appointments and track all the details about the tests. Store the records systematically and securely for the further references.

2. Business Requirements Overview:

- Doctor's Appointment System is the public web application used for one specific Doctor.

- There are mainly three types of user.

- Admin will be able to register a new (recruited) doctor into the system and will have access to all the details regarding appointment booking and patients taking treatment.

- Patients can search and book appointments.

- Already registered patients can view further schedule.

Doctor's Appointment System provides such functionalities which connect doctor and patient with each other efficiently and it will reduce crowding in hospital.

3. Functional Requirements Overview:

Doctor's Appointment System consists of three modules described as below.

1. Admin Module
2. Doctor Module
3. Patient Module

3.1 Admin Module

- Admin can login.

- Admin can register/approve a newly recruited doctor.

- Admin can also view the list of all the doctors and patients who are registered in the system.

- Admin can also view all details of doctors and patients.

- Admin can also view all the appointment bookings of all the doctors.

- Admin can also view most visited patient and doctor.

3.2 Doctor Module

- Doctor can register.

- Doctor can login after the admin approvement.

- A Doctor can add/modify his schedule of availability.

- He can view details of patients.

- He can view the appointment schedule.

3.3 Patient Module

- A Patient can register.

- Patient can login and book an appointment.

- He can login into his profile once registered.

- He can book/cancel an appointment.

- He can search doctor according to area.

4. Non-Functional Requirement:

- The website should use professional design, look and feel and color scheme.

- Users will have no limitations for accessing the application through Internet. The portal being an internet application, it is difficult specify exact number of visitor or users. Hence we will target the system to support between 5 and 10 thousands users on launch of phase 1.

- Being a public website, the site must follow general usability guidelines for menus, navigation, colors, links and other actions provided on the screens.

- The system should be designed in such a manner that user will be able to complete tasks in minimum number of steps.

5. Use-Case Diagram

5.1 Admin:
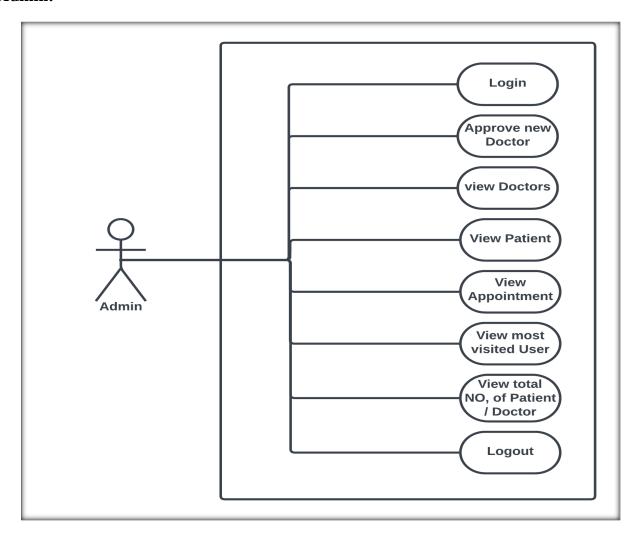
Fig. Use-Case Diagram for Admin

1. In Admin use case diagram Admin is the Actor.
2. Admin can handle following use cases:
   a. Login
   b. Register New Doctor
   c. View Doctor Details
   d. View Patient Details
   e. View Appointment Details
   f. Approval
   g. View Most Visited User
   h. View Total No. of Patient/Doctor
   i. Logout

5.2 Doctor:
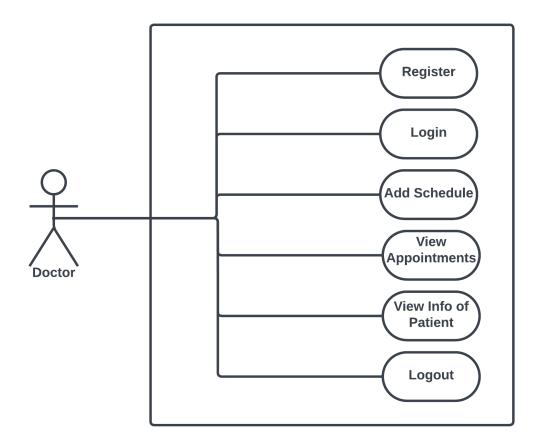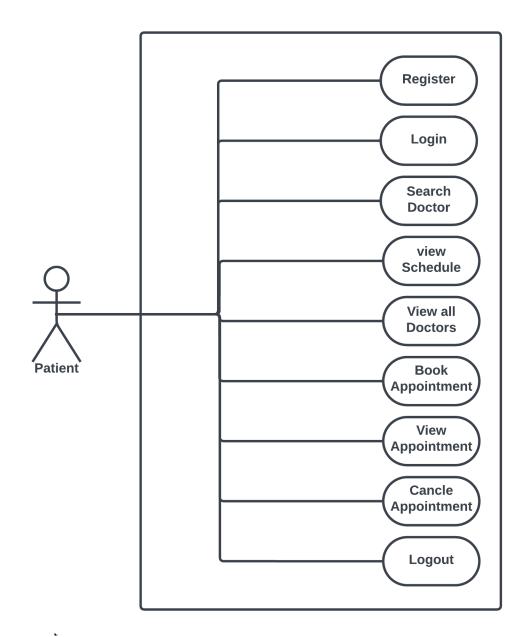
Fig. Use-Case Diagram for Doctor

1. In Doctor use case diagram Doctor is the Actor.
2. Doctor can handle following use cases:
    a. Register
    b. Login
    c. Add Schedule
    d. View Appointments
    e. View Patients Information
    f. Logout

5.3 Patient:

1. In Patient use case diagram Patient is the Actor.
2. Patient can handle following use cases:
   a. Register
   b. Login
   c. Book an Appointment
   d. Cancel Appointment
   e. View Appointment
   f. View Doctor Information
   g. Search According Area
   h. Logout

6. Database Design:

1]   users_master table

Field	Type	Null	Key	Default	Extra
id_	int	NO	PRI	NULL	auto_increment
role_id_	int	YES	MUL	NULL	
email_	varchar(255)	NO		NULL	
password_	varchar(255)	YES		NULL	
question_id_	int	NO	MUL	NULL	
answer_	varchar(255)	NO		NULL	
status_	int	NO		NULL	

2]   role_master table

Field	Type	Null	Key	Default	Extra
id_	int	NO	PRI	NULL	
role_type_	char(3)	NO		NULL	

3]   doctors_master table

Field	Type	Null	Key	Default	Extra
id_	int	NO	PRI	NULL	auto_increment
fname_	varchar(255)	NO		NULL	
email_	varchar(255)	NO		NULL	
lname_	varchar(255)	NO		NULL	
gender_	varchar(255)	NO		NULL	
experience_	int	NO		NULL	
user_id_	int	NO	MUL	NULL	
qualification_	varchar(255)	NO		NULL	
password_	varchar(255)	NO		NULL	
address_	varchar(255)	NO		NULL	
contact_	varchar(255)	NO		NULL	
location_id_	int	NO	MUL	NULL	
specialities_id_	int	NO	MUL	NULL	
description_	varchar(255)	NO		NULL	
status_	int	NO		NULL	

4]   patients_master table

Field	Type	Null	Key	Default	Extra
id_	int	NO	PRI	NULL	auto_increment
user_id_	int	NO	MUL	NULL	
fname_	varchar(255)	NO		NULL	
lname_	varchar(255)	NO		NULL	
gender_	varchar(255)	NO		NULL	
email_	varchar(255)	NO		NULL	
password_	varchar(255)	NO		NULL	
address_	varchar(255)	NO		NULL	
dob_	date	NO		NULL	
contact_	varchar(255)	NO		NULL	

5]   address_master table

Field	Type	Null	Key	Default	Extra
id_	int	NO	PRI	NULL	
location_Name_	varchar(255)	NO		NULL	

6]   questions_master table

Field	Type	Null	Key	Default	Extra
id_	int	NO	PRI	NULL	
questions_	varchar(255)	NO		NULL	
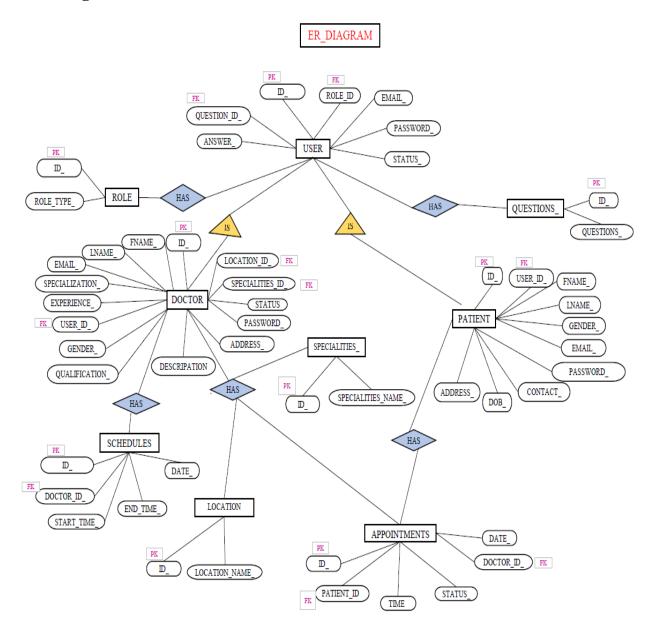
7]   appointments_master table

Field	Type	Null	Key	Default	Extra
id_	int	NO	PRI	NULL	auto_increment
patient_id_	int	NO	MUL	NULL	
time_	time	NO		NULL	
doctor_id_	int	NO	MUL	NULL	
status_	int	NO		NULL	
date_	date	NO		NULL	

9]   schedules_master table

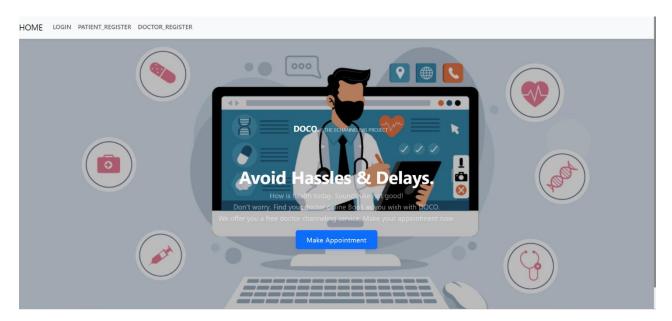| Field	Type	Null	Key	Default	Extra
id_	int	NO	PRI	NULL	auto_increment
doctor_id_	int	NO	MUL	NULL	
start_time_	time	NO		NULL	
end_time_	time	NO		NULL	
date_	date	NO		NULL	

7. ER-Diagram:

E-R diagram shows database of Doctor's Appointment System
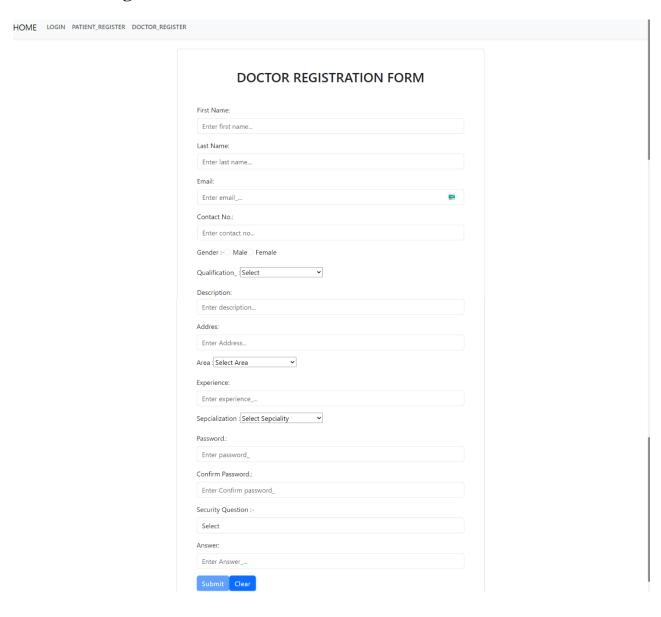
8. Snapshots:

8.1 Home Page :

Following snapshot shows the Home page for Doctor's Appointment System
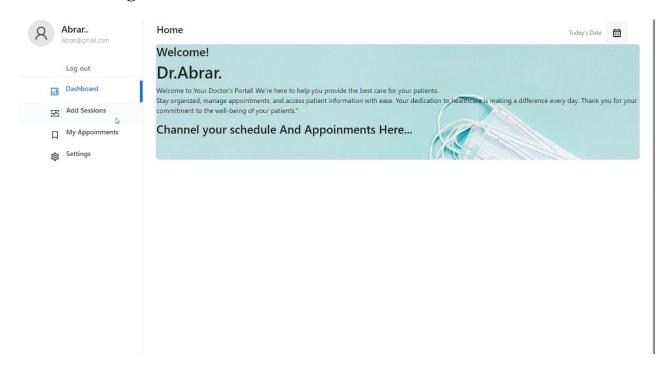
This page contains following controls

- Home
- Doctor Registration
- Patient Registration
- Login

8.2 Doctor Registration:

DOCTOR REGISTRATION FORM

First Name:

> Enter first name...

Last Name:

> Enter last name...

Email:

> Enter email_...

Contact No.:

> Enter contact no...

Gender :- ○ Male ○ Female

Qualification_ : Select ▾

Description:

> Enter description...

Addres:

> Enter Address...

Area : Select Area ▾

Experience:

> Enter experience_...

Sepcialization : Select Sepciality ▾

Password.:

> Enter password_

Confirm Password.:

> Enter Confirm password_

Security Question :-

> Select

Answer:

> Enter Answer_...

Submit **Clear**

8.3 Doctor Page :

8.4 Add Schedule:

8.5 View Appointment and cancel:

View Appointments

Date	Day	Time			
2023-08-29	Tuesday	13:00:00		View Info	Cancel
2023-08-29	Tuesday	13:30:00	Ashan Mohd	View Info	Cancel
2023-08-29	Tuesday	14:00:00	Ashan Mohd	View Info	Cancel
2023-08-29	Tuesday	19:00:00	Ashan Mohd	View Info	Cancel

localhost:3000 says

cancellation of appointment succesfull !!!..

Ok

Back
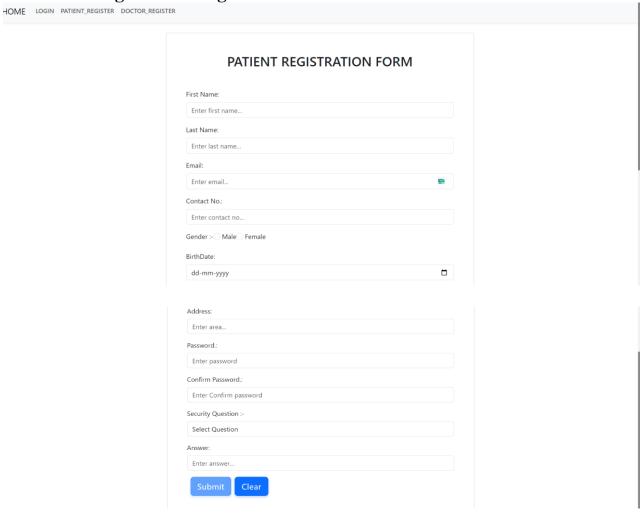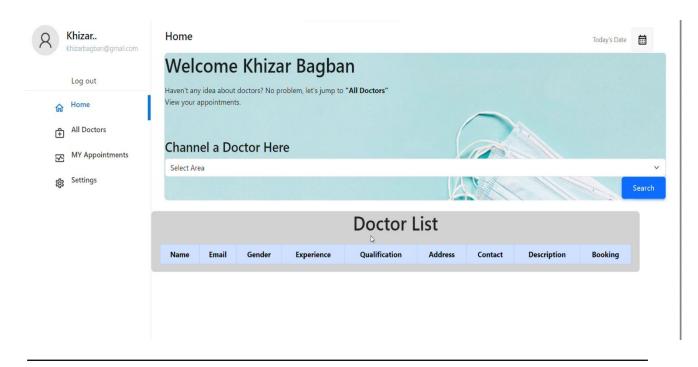
8.6 Patient Information:

HOME   LOGIN   PATIENT_REGISTER   DOCTOR_REGISTER

Doctor Information

Patient ID :	2
Name :	Ashan Mohd
Email :	Ashan@gmail.com
Gender :	Male
Birthdate :	2023-08-04
Address :	Pune
Contact :	8669770508

Back
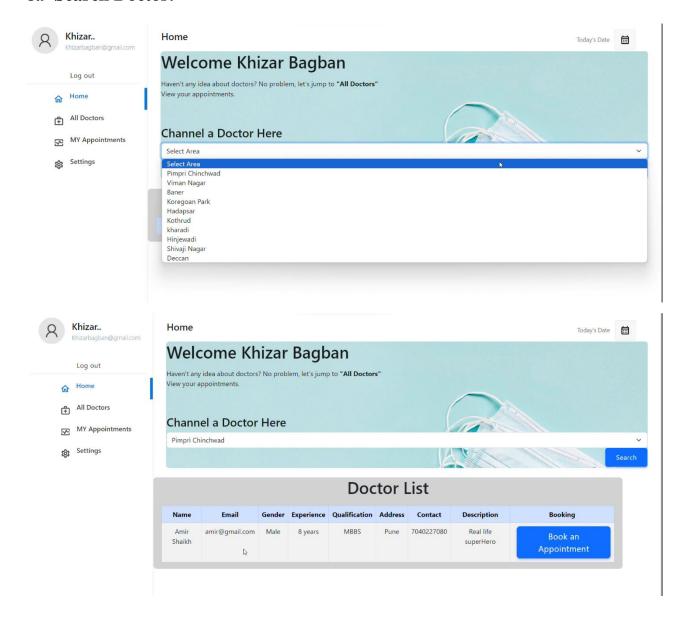
8.7 Patient Registration Page:

PATIENT REGISTRATION FORM

First Name:

Enter first name...

Last Name:

Enter last name...

Email:

Enter email...

Contact No.:

Enter contact no...

Gender :- Male Female

BirthDate:

dd-mm-yyyy

Address:

Enter area...

Password.:

Enter password

Confirm Password.:

Enter Confirm password

Security Question :-

Select Question

Answer:

Enter answer...

Submit   Clear

8.8 Patient Home:

Khizar..
Khizarbagban@gmail.com

Log out

Home

All Doctors

MY Appointments

Settings

Home   Today's Date

Welcome Khizar Bagban

Haven't any idea about doctors? No problem, let's jump to **"All Doctors"**
View your appointments.

Channel a Doctor Here

Select Area

Search

Doctor List

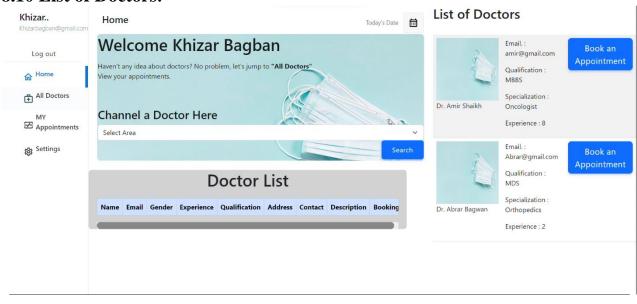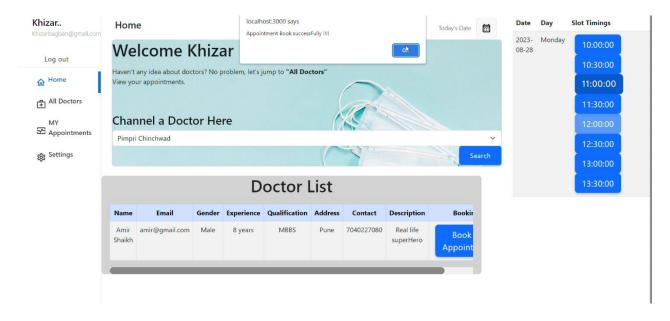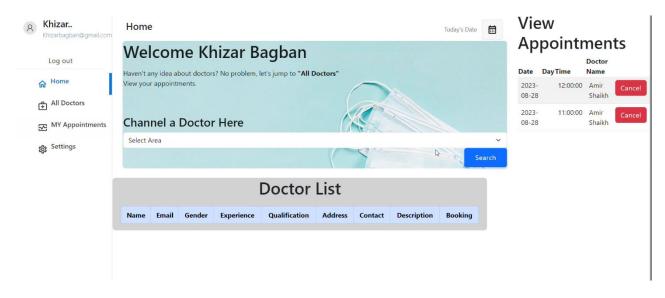| Name	Email	Gender	Experience	Qualification	Address	Contact	Description	Booking

8.9 Search Doctor:

8.10 List of Doctors:

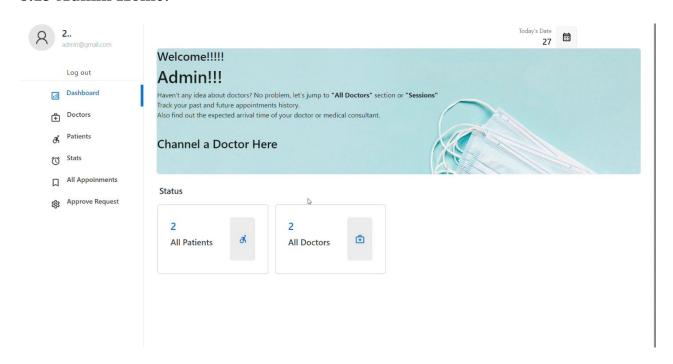## 8.11 Appointment Booking:

8.12 View Appointment and Cancel:

8.13 Admin Home:

8.14 View Appointments:

Appointments Information

ID	Patient	Doctor	Date	Day	Time	Status
1	Khizar Bagban	Dr. Amir Shaikh	2023-08-28	Monday	12:00:00	1
2	Ashan Mohd	Dr. Abrar Bagwan	2023-08-29	Tuesday	11:00:00	0
3	Ashan Mohd	Dr. Amir Shaikh	2023-08-28	Monday	10:30:00	0
4	Ashan Mohd	Dr. Abrar Bagwan	2023-08-29	Tuesday	12:00:00	0
5	Ashan Mohd	Dr. Abrar Bagwan	2023-08-29	Tuesday	12:30:00	0
6	Ashan Mohd	Dr. Abrar Bagwan	2023-08-29	Tuesday	13:00:00	0
7	Ashan Mohd	Dr. Abrar Bagwan	2023-08-29	Tuesday	13:30:00	1
8	Ashan Mohd	Dr. Abrar Bagwan	2023-08-29	Tuesday	14:00:00	1
9	Ashan Mohd	Dr. Abrar Bagwan	2023-08-29	Tuesday	19:30:00	0
10	Ashan Mohd	Dr. Abrar Bagwan	2023-08-29	Tuesday	19:00:00	1
11	Khizar Bagban	Dr. Amir Shaikh	2023-08-28	Monday	11:00:00	0

Back

8.15 View Doctors:

Doctors Information

Doctor ID	Name	Department	
1	Dr. Amir Shaikh	Oncologist	View Info
2	Dr. Abrar Bagwan	Orthopedics	View Info

Back

8.16 Approve Request:

Request Information

Doctor ID	Doctor Email	Approve

Back

8.17 View Patients:

Patients Information

Patient ID	Name	BirthDate	
1	Khizar Bagban	2023-08-30	View details
2	Ashan Mohd	2023-08-04	View details

Back

8.18 Stats:

Most Frequent Patients

Rank	Name	Email	Contact	Gender	Date of Birth
1	Ashan Mohd	Ashan@gmail.com	8669770508	Male	2023-08-04
2	Khizar Bagban	Khizarbagban@gmail.com	9077559863	Male	2023-08-30
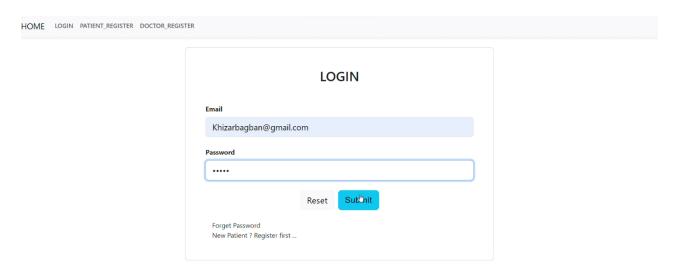
Back

Most Frequent Doctors

Rank	Name	Email	Contact
1	Abrar Bagwan	Abrar@gmail.com	9077559863
2	Amir Shaikh	amir@gmail.com	7040227080

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8.19 Login:

9. CONCLUSION AND FUTURE SCOPE:

- ➢ Doctor's Appointment System provides better platform to get connected with doctor and patients efficiently.

- ➢ Use of this system will be specific for local clinics.

- ➢ Patient will be able to book an appointment 24 hrs. prior to the schedule.

- ➢ Doctors will be able to provide their schedule at least for one week in advance.

- ➢ Booking option will be available 24 hours, 7 days. Doctors can add their schedule at least 48 hours in advance.