HOSPITAL LIFE PLUS

Project: Online Hospital Management

Synopsis

Since the evolution of the internet, it is flourishing into the most preferred source of information. The internet provides excellent opportunities for disseminating health information. Since the increasingly substantial growth in the number of active internet users, the health care **website design** is becoming significant in society.

Today, having a website for a hospital is as very important. The internet is one of the fastest sources of information. Patients scroll through the medical centres' website to avail all the necessary information before hopping into the building. It allows them to find the timings of the specific specialist, get test reports online (via email or message), as well as also book their appointments.

Advantages of having a website for hospitals are:

1. It enables 24/7 online presence:
Having a website for the hospital means, patients are always able to find it anytime and anywhere. This means that they can get all the information even after business hours. Our website will continue to serve the patients and secure new ones. It offers convenience as they can access the information they require at the comfort of their home. This helps patients during the time of emergency as well.

2. It helps in relevant information exchange:
An effective **website design**, along with all the relevant and important information will be of great help for your patients. The simplest, as well as the informative website, acts as an easy way of communication between the medical center and the information seeker. It will also build online credibility.

3. Expands Reach:
Another advantage of having an easy to navigate healthcare website is that it reaches the information seekers beyond the geographical frontiers. This means that anyone from any corner of the world can have access to the hospital's information. This allows a global reach and expansion

4. It allows smooth customer service online:
Before the popularity of websites, people used to stand in long queue to book their appointments. They were also asked to wait for quite a long time to get the necessary information about the medical center or the doctor's availability. But with the help of a medical website, you can take off half the burden from yourself as well as from your patients. A potential website allows you to access all the necessary information which further saves time and the effort.

Scenario

A hospital is organized into several departments. Each department has UNIQUE department_name, single Department_contact_no and an HOD_name who manages a particular department. Each department has several tests under it.

A department may have several doctors, each of which has Doctor_name, a UNIQUE Doctor_ID and password, Department_name and single Mobile_no. The doctor treats the patients and provides diagnosis and prescription. He also decides if a patient should undergo any tests or not.

Each Patient has Patient_name, UNIQUE Patient_ID and password, Date_of_birth, gender, single Mobile_no and email ID, and address. The age of the patient is derived from his/her date of birth. The patient is allowed to book an appointment with any doctor under the department of choice. The Patient selects an available slot for an appointment. Any doctor is allowed to edit his/her available dates.

The doctor makes a diagnosis and gives a prescription. Each prescription will have UNIQUE prescription_id, date, Patient_ID , patient_name, department_name, diagnosis, medicine_name and the dosage.

Based on the diagnosis, the doctor selects the tests to be done by the patient. Each of tests done by the patient will have UNIQUE patient_ID, patient_name, Department_name, test_name, status_of_test and pdf.

MODULE 1: AUTHENTICATION MODULE
This module has 3 views: Patient, Doctor and Admin which includes registration, signing up, logging in, and verification via email by sending a one-time password (OTP). Users have a unique username and password. Upon logging in, the user is directed to a specific homepage, depending on whether the user is a patient, a doctor, or an administrator. If a user is unable to remember his/her password while logging in, there is an option to "forget password". The user can log out if they wish to exit.

LOGIN PAGE
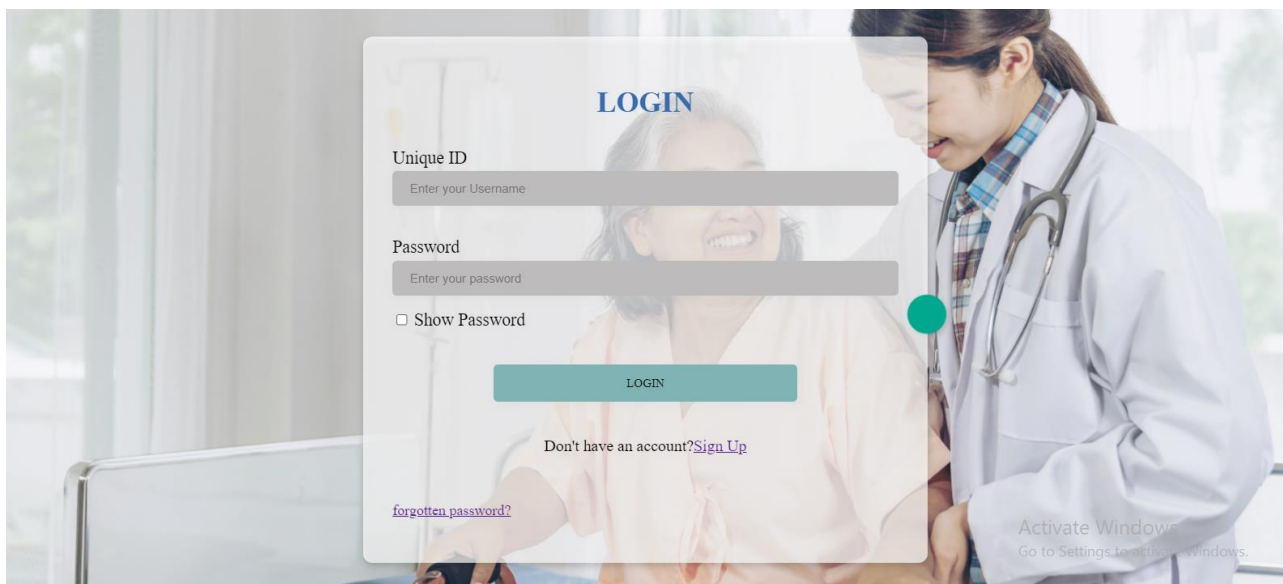
If you click on sign up it redirects to registration page and forgotten password redirects to forgot password page.

REGISTRATION PAGE

PATIENT REGISTRATION

Enter your Details:

First Name

test

Last Name

test2

Date Of Birth

06 / 20 / 2001

Gender:

🔘 Female ⚪ Male ⚪ Others

Address

House No

123

Street

st inez

City

panaji

State

goa

Pin Code

403001

Email ID

nouf.shaikh2@gmail.com

Mobile No.

+917666063469

Alarms & Clock

Set Password.

12345

☑ Show Password

GENERATE OTP

Generate OTP button sends an OTP to the email entered and redirects to OTP page
OTP received on email
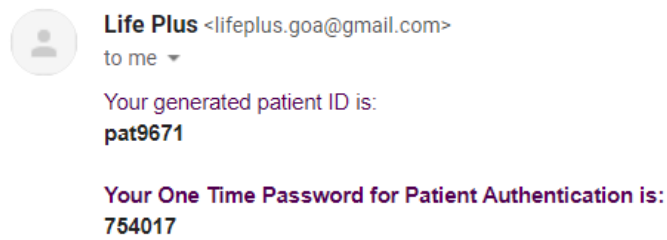
Life Plus <lifeplus.goa@gmail.com>
to me

Your generated patient ID is:
pat9671

Your One Time Password for Patient Authentication is:
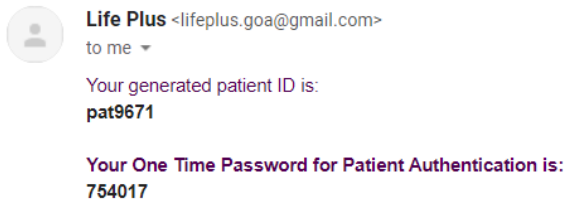754017

OTP PAGE

Verify OTP button redirects to Login page if the OTP is valid and resnd OTP generates OTP again to the same email

FORGOT PASSWORD PAGE

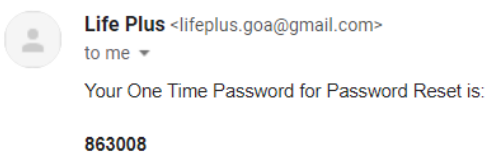VERIFY button redirects to OTP page and sends an OTP to the entered email

Resend OTP send OTP again on the email

Life Plus <lifeplus.goa@gmail.com>
to me

Your generated patient ID is:
pat9671

Your One Time Password for Patient Authentication is:
754017

OTP for password reset 	Inbox ×

Life Plus <lifeplus.goa@gmail.com>
to me

Your One Time Password for Password Reset is:

863008

OTP VERIFICATION

Enter OTP

639209

VERIFY OTP

RESEND OTP

Verify OTP redirects to password reset page

PASSWORD RESET

Enter New Password

23456

☑ Show Password

RESET

LOGIN

Unique ID

pat9671

Password

23456

☑ Show Password

LOGIN

Don't have an account?Sign Up

forgotten password?

Login button redirects to the homepage

MODULE 2: APPOINTMENT
This module is handled by 3 views: Patient, Admin and Doctor. A patient books an appointment by entering a unique patient ID, name, email, and the department for which they want to schedule an appointment. Once the patient books an appointment, a request will be sent to the admin where the admin accepts the request and schedules the pending appointment by assigning the date, slot, and the Doctor.
Upon scheduling the appointment, the patient receives an email with the details, and for the doctor that is assigned to the patient, the appointment appears on the doctor's homepage**.**

PATIENT: The patient clicks on **book appointment** on home page/ **Appointment** in Nav Bar to book appointment and gets directed to appointment booking page

After clicking **Submit Request:**

ADMIN: The admin can schedule pending appointment requests by clicking on Schedule appointments

Patient receives an email of the appointment details and the appointment is added to the list of appointments with status=0 (appointment not yet completed)

Database:

username	fname	lname	email	dept	doc	app_date	slot	status
pat8753	sandeep	patnaik	urimeg1721@gmail.com	orthopaedics	doc7629	2021-12-23	4	0
pat3992	Megan	Fernandes	urimeg1721@gmail.com	gynecology	doc2935	2022-01-01	1	0
pat7652	Lyzandra	Fernandes	lyzanfernandes1911@gmail.com	gynecology	doc2008	2021-12-30	3	1
pat1724	Uriel	Fernandes	ujffeds@gmail.com	orthopaedics	doc9838	2022-01-19	1	0

DOCTOR: The appointment gets added to the doctor's list of appointments on homepage.

Dr. Santiago Home Page:

Welcome Doctor
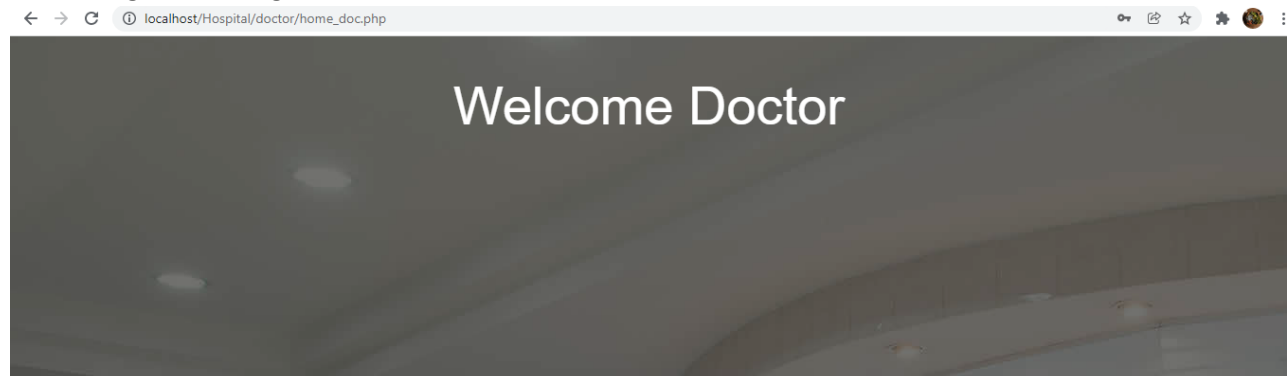
Appointments

Username	First name	Last name	date	slot	Status
pat1724	Uriel	Fernandes	2022-01-19	1	PRESCRIBE

MODULE 3: PRESCRIPTION

This is a process handled by 2 views: Patient and Doctor.

A patient can be prescribed medications by a Doctor which comprises of medicine name, type, dose, and times per day. The doctor can add any number of medications to the prescriptions. The Doctor can also prescribe tests if necessary. The prescription is then displayed on the patient's homepage. By having the prescription on a patient's dashboard, the prescription is easily accessible by the patient.

This method makes it easier for patients as well as physicians to track medication details than traditional or paper-based prescriptions, which tend to lose medication history.

DOCTOR: The doctor clicks on PRESCRIBE for a given patient to prescribe a prescription for him/her

After clicking **Done**:

Prescription

Patient ID: pat1724   Prescription Date: 2022-01-19

Medicine	Dosage	Type	Times Per Day
b complex	tab	500mg	1
calcimax 500	tab	500mg	3
Rocuronium	tube	as req	2

[Prescribe Tests]   [Back To Home Page]

Doctor can either go ahead and prescribe tests or stop there by clicking on home page

PATIENT: Patient can view his/her prescription once they log in

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Home   About Us   Prescription   Appointments   Tests   Log Out

Prescriptions

Username	Appointment Date	View
pat1724	2021-12-18	VIEW
pat1724	2022-01-19	VIEW

Prescription

Patient ID: pat1724   Prescription Date: 2022-01-19

Medicine	Dosage	Type	Times Per Day
b complex	tab	500mg	1
calcimax 500	tab	500mg	3
Rocuronium	tube	as req	2

[Back]

MODULE 4: TESTS

This is an addition to the prescription module which lets the doctor prescribe tests to the patient. The doctor can assign a number of tests offered by an individual department. The prescribed tests are then displayed on the patient's homepage. All the tests prescribed by different doctors can be checked on the patient's dashboard. Patients thus spend less time waiting to hear from physicians, which improves process satisfaction. When patients receive prescribed tests from their doctors, it is possible that they will lose the paper. E-prescriptions eliminate this problem.

DOCTOR: Doctor can assign tests to a particular patient by selecting department under which the test appears.

Select department and enter test name

Save and get redirected to tests page incase new test to be added. If none, click on **Back To Home Page**

After completing any prescription and allotting tests, the doctor can view the prescription again from home page. The prescription and allotted tests get added to the prescription and allotted_tests table respectively. The status of appointment is updated to 1 (consultation completed)

Allotted_test

username	dept	app_date	test_name
pat7652	gynecology	2021-12-30	sonography
pat1724	orthopaedics	2022-01-19	Physical Examination
pat1724	orthopaedics	2022-01-19	Doppler Ultrasound

Prescription

username	app_date	medicine	type	dosage	times
pat7652	2021-12-30	b complex	tab	500mg	1
pat7652	2021-12-30	avil	tab	500mg	3
pat1724	2022-01-19	b complex	tab	500mg	1
pat1724	2022-01-19	calcimax 500	tab	500mg	3
pat1724	2022-01-19	Rocuronium	tube	as req	2

Appointment

username	fname	lname	email	dept	doc	app_date	slot	status
pat8753	sandeep	patnaik	urimeg1721@gmail.com	orthopaedics	doc7629	2021-12-23	4	0
pat3992	Megan	Fernandes	urimeg1721@gmail.com	gynecology	doc2935	2022-01-01	1	0
pat7652	Lyzandra	Fernandes	lyzanfernandes1911@gmail.com	gynecology	doc2008	2021-12-30	3	1
pat1724	Uriel	Fernandes	ujffeds@gmail.com	orthopaedics	doc9838	2022-01-19	1	1

Doctor homepage after completing consultation of a patient:

Click on **VIEW**

Patient can view the medicines prescribed and tests allotted to him/her

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Prescription

Patient ID: pat1724   Prescription Date: 2022-01-19

Medicine	Dosage	Type	Times Per Day
b complex	tab	500mg	1
calcimax 500	tab	500mg	3
Rocuronium	tube	as req	2

Tests

Department	Test Name
orthopaedics	Physical Examination
orthopaedics	Doppler Ultrasound

Back To Home Page

PATIENT: Patient can view the tests allotted to him from a certain appointment date after logging in

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Tests

Username	Appointment Date	View
pat1724	2021-12-18	VIEW
pat1724	2022-01-19	VIEW

Tests

Patient ID: pat1724   Appointment Date: 2022-01-19

Department	Test Name
orthopaedics	Physical Examination
orthopaedics	Doppler Ultrasound

Back

ADMIN FUNCTIONALITIES:

Apart from scheduling appointments, admin can:

1. Edit/delete details of doctors and patients
2. Add a new doctor to the database
3. Keep a record of all scheduled appointments so far and also completed appointments
4. Keep a record of all tests being assigned to various patients

Doctor

Edit/delete details of doctors

After deleting records of Dr. Sandeep Patnaik

doc9989	james	bond	male	neurology	urimeg1721@gmail.com	8431737314	bond6567
doc2008	Nina	Dobrev	female	gynecology	urimeg1721@gmail.com	8431737314	Dobrev7775
doc6935	jake	peralta	male	dental	urimeg1721@gmail.com	8431737314	peralta4652
doc9838	amy	santiago	female	orthopaedics	urimeg1721@gmail.com	8431737314	santiago8579
doc3976	Leena	Naik	female	pediatrics	nouf.shaikh2@gmail.com	7666063469	Naik5702
doc8153	Will	Smith	male	general	urimeg1721@gmail.com	8431737314	Smith9336
doc2935	Blake	Shelton	male	gynecology	urimeg1721@gmail.com	8431737314	Shelton4700
doc7629	Sandra	Williams	female	orthopaedics	urimeg1721@gmail.com	8431737314	Williams6582

Editing details of Dr. Nina Dobrev (changing contact number)

username	fname	lname	gender	dept	email	mobile	passwrd
doc5785	sarah	gomes	female	Cardiology	urimeg1721@gmail.com	8431737314	gomes7378
doc9989	james	bond	male	neurology	urimeg1721@gmail.com	8431737314	bond6567
doc2008	Nina	Dobrev	female	gynecology	urimeg1721@gmail.com	9850461640	Dobrev7775
doc6935	jake	peralta	male	dental	urimeg1721@gmail.com	8431737314	peralta4652
doc9838	amy	santiago	female	orthopaedics	urimeg1721@gmail.com	8431737314	santiago8579
doc3976	Leena	Naik	female	pediatrics	nouf.shaikh2@gmail.com	7666063469	Naik5702
doc8153	Will	Smith	male	general	urimeg1721@gmail.com	8431737314	Smith9336
doc2935	Blake	Shelton	male	gynecology	urimeg1721@gmail.com	8431737314	Shelton4700
doc7629	Sandra	Williams	female	orthopaedics	urimeg1721@gmail.com	8431737314	Williams6582

Adding a doctor to the database:

Doctor receives an auto-generated username and password via email

username	fname	lname	gender	dept	email	mobile	passwrd
doc5785	sarah	gomes	female	Cardiology	urimeg1721@gmail.com	8431737314	gomes7378
doc2724	Kira	Evergreen	female	ent	urimeg1721@gmail.com	8431737314	Evergreen5404
doc9989	james	bond	male	neurology	urimeg1721@gmail.com	8431737314	bond6567
doc2008	Nina	Dobrev	female	gynecology	urimeg1721@gmail.com	9850461640	Dobrev7775
doc6935	jake	peralta	male	dental	urimeg1721@gmail.com	8431737314	peralta4652
doc9838	amy	santiago	female	orthopaedics	urimeg1721@gmail.com	8431737314	santiago8579
doc3976	Leena	Naik	female	pediatrics	nouf.shaikh2@gmail.com	7666063469	Naik5702
doc8153	Will	Smith	male	general	urimeg1721@gmail.com	8431737314	Smith9336
doc2935	Blake	Shelton	male	gynecology	urimeg1721@gmail.com	8431737314	Shelton4700
doc7629	Sandra	Williams	female	orthopaedics	urimeg1721@gmail.com	8431737314	Williams6582

Edit/delete details of patients

Username	First name	Last name	DOB	Gender	Hno.	Street	City	State	Pincode	email id	Mobile no	Password	Edit	De
pat7953	Nicoletta	Fernandes	1970-06-22	female	944	Mangeuiral vaddo	St. Estevam	Goa	403106	uriel_21_fernandes@outlook.com	9850461640	chocolate	EDIT	
pat3992	Megan	Fernandes	2001-10-17	female	944	Mangeuiral vaddo	St. Estevam	Goa	403106	urimeg1721@gmail.com	8431737314	1234	EDIT	
pat1724	Uriel	Fernandes	2001-10-17	male	944	Mangeuiral vaddo	St. Estevam	Goa	403106	ujffeds@gmail.com	9834038402	m42f2cdhx9	EDIT	
pat7652	Lyzandra	Fernandes	2000-11-19	female	944	Mangeuiral vaddo	St. Estevam	Goa	403106	lyzanfernandes1911@gmail.com	9850688932	baiiiiiii	EDIT	
pat8627	sarah	gomes	1990-12-21	female	922	backstreet	gotham	tamil nadu	560987	urimeg1721@gmail.com	8431737314	hello	EDIT	
pat8753	sandeep	patnaik	2001-08-31	male	657	somewhere	vasco	goa	403121	urimeg1721@gmail.com	8431737314	manasi	EDIT	
pat2910	sonali	naik	2001-03-24	female	1	farmagudi road	ponda	goa	403401	sonalishnaik@gmail.com	7020979766	12	EDIT	

Editing details of Patient Lyzandra Fernandes (Editing address)

Edit Patient data

First Name :
Lyzandra

Last Name:
Fernandes

DOB:
19-11-2000

Gender:
◉Female ⚪Male ⚪Others

Hno:
925

Street:
18th June Road

City:
Panaji

State:
Goa

Pincode:
403001

email ID:
lyzanfernandes1911@gmail.com

Mobile no:

9850688932

Password:

••••••••

Cancel Update

username	fname	lname	DOB	gender	Hno	street	city	state	pincode	email	mobile	passwrd
pat7953	Nicoletta	Fernandes	1970-06-22	female	944	Mangeuiral vaddo	St. Estevam	Goa	403106	uriel_21_fernandes@outlook.com	9850461640	chocolate
pat3992	Megan	Fernandes	2001-10-17	female	944	Mangeuiral vaddo	St. Estevam	Goa	403106	urimeg1721@gmail.com	8431737314	1234
pat1724	Uriel	Fernandes	2001-10-17	male	944	Mangeuiral vaddo	St. Estevam	Goa	403106	ujffeds@gmail.com	9834038402	m42f2cdhx9
pat7652	Lyzandra	Fernandes	2000-11-19	female	925	18th June Road	Panaji	Goa	403001	lyzanfernandes1911@gmail.com	9850688932	baiiiiiii
pat8627	sarah	gomes	1990-12-21	female	922	backstreet	gotham	tamil nadu	560987	urimeg1721@gmail.com	8431737314	hello
pat8753	sandeep	patnaik	2001-08-31	male	657	somewhere	vasco	goa	403121	urimeg1721@gmail.com	8431737314	manasi
pat2910	sonali	naik	2001-03-24	female	1	farmagudi road	ponda	goa	403401	sonalishnaik@gmail.com	7020979766	12

After deleting records of patient Sarah Gomes

username	fname	lname	DOB	gender	Hno	street	city	state	pincode	email	mobile	passwrd
pat7953	Nicoletta	Fernandes	1970-06-22	female	944	Mangeuiral vaddo	St. Estevam	Goa	403106	uriel_21_fernandes@outlook.com	9850461640	chocolate
pat3992	Megan	Fernandes	2001-10-17	female	944	Mangeuiral vaddo	St. Estevam	Goa	403106	urimeg1721@gmail.com	8431737314	1234
pat1724	Uriel	Fernandes	2001-10-17	male	944	Mangeuiral vaddo	St. Estevam	Goa	403106	ujffeds@gmail.com	9834038402	m42f2cdhx9
pat7652	Lyzandra	Fernandes	2000-11-19	female	925	18th June Road	Panaji	Goa	403001	lyzanfernandes1911@gmail.com	9850688932	baiiiiiii
pat8753	sandeep	patnaik	2001-08-31	male	657	somewhere	vasco	goa	403121	urimeg1721@gmail.com	8431737314	manasi
pat2910	sonali	naik	2001-03-24	female	1	farmagudi road	ponda	goa	403401	sonalishnaik@gmail.com	7020979766	12

Record of all appointments

All appointments

Username	First name	Last name	email id	Department	Appointment Date	Slot No
pat8753	sandeep	patnaik	urimeg1721@gmail.com	orthopaedics	2021-12-23	4
pat3992	Megan	Fernandes	urimeg1721@gmail.com	gynecology	2022-01-01	1
pat7652	Lyzandra	Fernandes	lyzanfernandes1911@gmail.com	gynecology	2021-12-30	3
pat1724	Uriel	Fernandes	ujffeds@gmail.com	orthopaedics	2022-01-19	1

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Doctors
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Completed appointments

Username	First name	Last name	email id	Department	Appointment Date	Slot No
pat7652	Lyzandra	Fernandes	lyzanfernandes1911@gmail.com	gynecology	2021-12-30	3
pat1724	Uriel	Fernandes	ujffeds@gmail.com	orthopaedics	2022-01-19	1

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Dashboard
Doctors
Patients
Appointments
Reports

Record of all tests allotted to various patients

Username	Department	Date	Test name	Test status
pat7652	gynecology	2021-12-30	sonography	DONE
pat1724	orthopaedics	2022-01-19	Physical Examination	DONE
pat1724	orthopaedics	2022-01-19	Doppler Ultrasound	DONE

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Doctors
Patients
Appointments
Reports