## LOVELY PROFESSIONAL UNIVERSITY

# PHAGWARA, PUNJAB



# Hospital Management system (database management system)

### **SUBMITTED BY:**

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Course Code & Name: INT306



#### INTRODUCTION

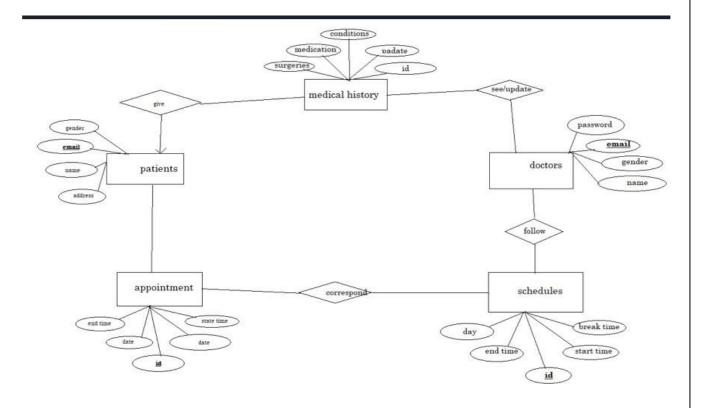
Health care is changing with a new emphasis on patient-centeredness. Fundamental to this transformation is the increasing recognition of patients' role in health care delivery and design. Medical appointment scheduling, as the starting point of most non-urgent health care services, is undergoing major developments to support active involvement of patients. By using the Internet as a medium, patients are given more freedom in decision making about their preferences for the appointments and have improved access.

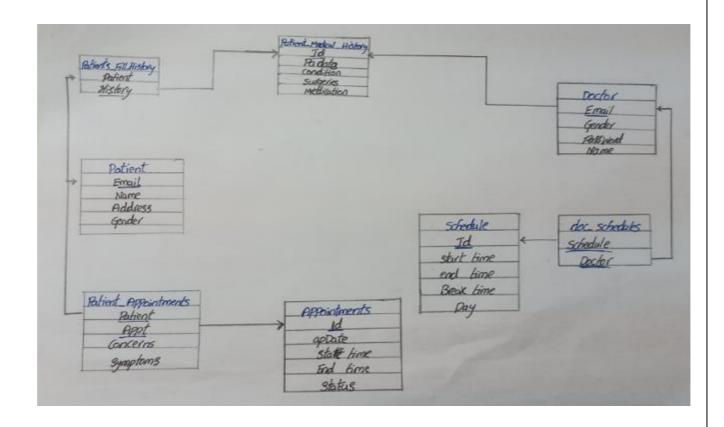
# **Objective**

The purpose of this study was to identify the benefits and barriers to implement Web-based medical scheduling discussed in the literature as well as the unmet needs under the current health care environment.



## **DESIGN OF THE PROJECT**







# **TABLES IN MY PROJECT**

### • PATIENT

EMAIL	PHONE_NUMBER	NAME	ADDRESS	GENDER
luffy@gmail.com	91234490	luffy	Tamil Nadu	male
nami@gmail.com	73328188	nami	Karnataka	female
zoro@gmail.com	79147101	zoro	Gujarat	male

## • PATIENT MEDICAL HISTORY

ID	PADATE	CONDITIONS	SURGERIES	MEDICATION
1	10-NOV-22	Pain in abdomen	Heart Surgery	dolo650
3	10-NOV-22	Indigestion	none	none
2	10-NOV-22	Body Pains	none	lodex

## • DOCTOR

EMAIL	GENDER	PASSWORD	NAME
sagar123@gmail.com	male	Vidya	v.v.v.sagar
sandy369@gmail.com	male	Sandeep	v.v.sandy
vamsi14@gmail.com	male	vami	G.vamsi
robin14@gmail.com	female	rob	N.robin

### SCHEDULE

ID	START_TIME	END_TIME	BREAKTIME	DAY
1	08:00	17:00	12:00	Monday
3	09:00	18:00	12:00	Wednesday
2	09:00	18:00	12:00	Thursday
3	09:00	18:00	12:00	Friday
2	09:00	18:00	12:00	Saturday
4	10:00	16:00	12:00	Sunday

# • DOC\_SCHEDULES

SCHED	DOCTOR
1	sagar123@gmail.com
3	vamsi14@gmail.com
2	sandy369@gmail.com
4	robin14@gmail.com

## APPOINTMENT

ID	APDATE	STARTTIME	ENDTIME	STATUS
1	10-NOV-22	09:00	10:00	Done
2	10-NOV-22	10:00	11:00	Done
3	10-NOV-22	14:00	15:00	Done

## • PATIENTS APPOINTMENT

PATIENT	APPT	CONCERNS	SYMPTOMS
luffy@gmail.com	1	none	itchy throat
nami@gmail.com	2	infection	fever
zoro@gmail.com	3	nausea	fever

# • PATIENT FILL HISTORY

PATIENT	HISTORY
luffy@gmail.com	1
nami@gmail.com	2
zoro@gmail.com	3

## **DESCRIBE OF MY TABLES**

## • DESCRIBE PATIENT

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PATIENT	EMAIL	Varchar2	50	-	-	1	-	-	-
	PHONE_NUMBER	Number	-	-	-	-	~	-	-
	NAME	Varchar2	50	-	-	-	-	-	-
	<u>ADDRESS</u>	Varchar2	60	-	-	-	-	-	-
	<u>GENDER</u>	Varchar2	20	-	-	-	-	-	-
								1	- 5

### • DESCRIBE PATIENT MEDICAL HISTORY

#### Object Type TABLE Object PATIENT\_MEDICAL\_HISTORY

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PATIENT_MEDICAL_HISTORY	<u>ID</u>	Number	-	-	0	1	-	-	-
	<u>PADATE</u>	Date	7	-	-	-	-	-	-
	CONDITIONS	Varchar2	100	-	-	-	-	-	-
	<u>SURGERIES</u>	Varchar2	100	-	-	-	-	-	-
	MEDICATION	Varchar2	100	-	-	-	-	-	-
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## • DESCRIBE DOCTOR

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DOCTOR	<u>EMAIL</u>	Varchar2	50	-	-	1	-	-	-
	GENDER	Varchar2	20	-	-	-	-	-	-
	PASSWORD	Varchar2	30	-	-	-	-	-	-
	NAME	Varchar2	50	-	-	-	-	-	-
								,	1 - 4

## • DESCRIBE SCHEDULE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SCHEDULE	<u>ID</u>	Number	-	-	0	1	-	-	-
	START_TIME	Varchar2	20	-	-	2	-	-	-
	END_TIME	Varchar2	20	-	-	3	-	-	-
	<b>BREAKTIME</b>	Varchar2	20	-	-	4	-	-	-
	DAY	Varchar2	20	-	-	5	-	-	-
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# • DESCRIBE DOC\_SCHEDULES

#### Object Type TABLE Object DOC\_SCHEDULES

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DOC SCHEDULES	SCHED	Number	100	-	0	1	-	-	18
	DOCTOR	Varchar2	50	-	27.1	2		15:	· ·
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### • DESCRIBE APPOINTMENT

#### Object Type TABLE Object APPOINTMENT

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
APPOINTMENT	<u>ID</u>	Number	-	-	0	1	-	-	-
	<u>APDATE</u>	Date	7	-	-	-	-	-	-
	STARTTIME	Varchar2	15	-	-	-	-	-	-
	ENDTIME	Varchar2	15	-	-	-	-	-	-
	STATUS	Varchar2	15	-	-	-	-	-	-
								•	1 - 5

## • DESCRIBE PATIENT APPOINTMENT

#### Object Type TABLE Object PATIENTS\_APPOINTMENTS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PATIENTS_APPOINTMENTS	PATIENT	Varchar2	50	-	-	1	-	-	-
	<u>APPT</u>	Number	-	-	0	2	-	-	-
	CONCERNS	Varchar2	40	-	-	-	-	-	-
	<u>SYMPTOMS</u>	Varchar2	40	-	-	-	-	-	-
									1 - 4

### • DESCRIBE PATIENT FILL HISTORY

#### Object Type TABLE Object PATIENTS\_APPOINTMENTS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PATIENTS_APPOINTMENTS	<u>PATIENT</u>	Varchar2	50	-	-	1	-	-	-
	<u>APPT</u>	Number	-	-	0	2	-	-	-
	CONCERNS	Varchar2	40	-	-	-	-	-	-
	<u>SYMPTOMS</u>	Varchar2	40	-	-	-	-	-	-
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#### CODE

```
FB CREATE TABLE Patient
email varchar(50) PRIMARY KEY,
phone_number number,
name varchar(50) NOT NULL,
address varchar(60) NOT NULL,
gender VARCHAR(20) NOT NULL
);
INSERT INTO Patient VALUES ('luffy@gmail.com',91234490,'luffy','Tamil
Nadu', 'male');
INSERT INTO Patient VALUES
('nami@gmail.com',73328188,'nami','Karnataka', 'female');
INSERT INTO Patient VALUES
('zoro@gmail.com',79147101,'zoro','Gujarat', 'male');
select*from Patient
describe patient
CREATE TABLE Patient_Medical_History
id int PRIMARY KEY,
padate DATE NOT NULL,
conditions VARCHAR(100) NOT NULL,
```

```
surgeries VARCHAR(100) NOT NULL,
medication VARCHAR(100) NOT NULL
);
INSERT INTO Patient_Medical_History VALUES (1,sysdate,'Pain in
abdomen', 'Heart Surgery', 'dolo650');
INSERT INTO Patient Medical History VALUES
(3,sysdate,'Indigestion','none','none');
INSERT INTO Patient_Medical_History VALUES (2,sysdate, 'Body
Pains', 'none', 'lodex');
select * from Patient Medical History
select * from Patient_Medical_History order by id
describe Patient_Medical_History
CREATE TABLE Doctor
email varchar(50) PRIMARY KEY,
gender varchar(20) NOT NULL,
password varchar(30) NOT NULL,
name varchar(50) NOT NULL
);
INSERT INTO Doctor VALUES ('sagar123@gmail.com', 'male', 'Vidya',
'v.v.v.sagar');
INSERT INTO Doctor VALUES ('sandy369@gmail.com', 'male', 'Sandeep',
'v.v.sandy');
INSERT INTO Doctor VALUES ('vamsi14@gmail.com', 'male', 'vami',
'G.vamsi');
INSERT INTO Doctor VALUES ('robin14@gmail.com', 'female', 'rob',
'N.robin');
```

```
select * from Doctor
describe Doctor
CREATE TABLE Schedule
id int NOT NULL,
start time varchar(20) NOT NULL,
end_time varchar(20) NOT NULL,
breaktime varchar(20) NOT NULL,
day varchar(20) NOT NULL,
PRIMARY KEY (id)
);
INSERT INTO Schedule VALUES ('001','08:00','17:00','12:00','Monday');
INSERT INTO Schedule VALUES
('003','09:00','18:00','12:00','Wednesday');
INSERT INTO Schedule VALUES ('002','09:00','18:00','12:00','Thursday');
INSERT INTO Schedule VALUES ('003','09:00','18:00','12:00','Friday');
INSERT INTO Schedule VALUES ('002','09:00','18:00','12:00','Saturday');
INSERT INTO Schedule VALUES ('004','10:00','16:00','12:00','Sunday');
select * from Schedule
select * from Schedule order by id
describe Schedule
CREATE TABLE doc_Schedules(
sched int NOT NULL.
```

```
doctor varchar(50) NOT NULL,
FOREIGN KEY (sched) REFERENCES Schedule (id) ON DELETE
CASCADE,
FOREIGN KEY (doctor) REFERENCES Doctor (email) ON DELETE
CASCADE.
PRIMARY KEY (sched, doctor)
);
insert into doc_Schedules values(001, 'sagar123@gmail.com')
insert into doc Schedules values(002, 'sandy369@gmail.com')
insert into doc Schedules values(003,'vamsi14@gmail.com')
insert into doc_Schedules values(004,'robin14@gmail.com')
select * from doc schedules
describe doc_schedules
CREATE TABLE Appointment
id int PRIMARY KEY,
apdate DATE NOT NULL,
starttime varchar(15) not null,
endtime varchar(15) not null,
status varchar(15) NOT NULL
);
INSERT INTO Appointment VALUES (1, sysdate, '09:00', '10:00', 'Done');
INSERT INTO Appointment VALUES (2, sysdate, '10:00', '11:00', 'Done');
INSERT INTO Appointment VALUES (3, sysdate, '14:00', '15:00', 'Done');
select * from Appointment
```

## describe Appointment

CREATE TABLE Patients\_Appointments(

patient varchar(50) NOT NULL,

appt int NOT NULL,

concerns varchar(40) NOT NULL,

symptoms varchar(40) NOT NULL,

FOREIGN KEY (patient) REFERENCES Patient (email) ON DELETE CASCADE,

FOREIGN KEY (appt) REFERENCES Appointment (id) ON DELETE CASCADE,

PRIMARY KEY (patient, appt)

);

INSERT INTO Patients\_Appointments VALUES ('luffy@gmail.com',1, 'none', 'itchy throat');

INSERT INTO Patients\_Appointments VALUES ('nami@gmail.com',2, 'infection', 'fever');

INSERT INTO Patients\_Appointments VALUES ('zoro@gmail.com',3, 'nausea', 'fever');

select \* from Patients\_Appointments

describe Patients\_Appointments

CREATE TABLE PatientsFillHistory(

patient varchar(50) NOT NULL,

history int NOT NULL,

FOREIGN KEY (patient) REFERENCES Patient (email) ON DELETE CASCADE,

```
FOREIGN KEY (history) REFERENCES Patient_Medical_History (id) ON DELETE CASCADE,

PRIMARY KEY (history)
);
INSERT INTO PatientsFillHistory VALUES ('luffy@gmail.com', 1);
INSERT INTO PatientsFillHistory VALUES ('nami@gmail.com', 2);
INSERT INTO PatientsFillHistory VALUES ('zoro@gmail.com', 3);
select * from PatientsFillHistory
describe PatientsFillHistory
```



#### **QUERIES**

- alter table patient add(password number)
- delete from patent where name = zoro;
- INSERT INTO PatientsFillHistory VALUES ('zoro@gmail.com', 3);
- update patient set phone\_number ='54717481' where name = 'zoro'
- SELECT id from Schedule natural JOIN doc\_schedules where id =001
- DELETE FROM patent WHERE NAME='zoro';
- drop table Appointment
- UPDATE doctor SET EMAIL='SANDEEP369@gmail.COM' WHERE name ='v.v.sandy';
- CREATE VIEW Doctor112 AS SELECT email,name FROM doctor WHERE password ='Vidya';
- insert into doc\_Schedules values(001,'sagar123@gmail.com')
- ALTER TABLE Appointment RENAME TO Appointments;
- INSERT INTO Appointment VALUES (3, sysdate, '14:00', '15:00', 'Done');
- INSERT INTO Doctor VALUES ('sagar123@gmail.com', 'male', 'Vidya', 'v.v.v.sagar');
- SELECT EMAIL FROM DOCTOR UNION SELECT DOCTOR FROM doc Schedules
- SELECT ID FROM Appointment INTERSECT SELECT ID FROM Patients\_Appointments
- INSERT INTO Patient\_Medical\_History VALUES (2,sysdate,'Body Pains','none','Iodex');
- TRUNCATE TABLE DOCTOR;

#### **PLSQL**

```
declare
id int PRIMARY KEY;
apdate varchar(15);
starttime varchar(15);
endtime varchar(15);
status varchar(15);
procedure Appointment(i in int, f in varchar, e in varchar, z in varchar, v
in varchar) is
begin
insert into Appointment('i','f','e','z','v');
end:
begin
id:=:id;
apdate:=:apdate;
starttime:=:starttime;
endtime:=:endtime;
status :=:status
update_ Appointment('id','apdate','starttime','endtime','status');
        :ID 4
  :APDATE 12:12:22
STARTTIME 1:40
 :ENDTIME 3:40
   :STATUS done
```

DECLARE
DOCTOR ID NUMBER:= :ENTER DOCTOR ID;
BEGIN
IF(VEH\_ID=001 OR VEH\_ID=002) THEN
DBMS\_OUTPUT.PUT\_LINE('AVAILABLE');
ELSE
DBMS\_OUTPUT.PUT\_LINE('NOT AVAILABLE');
END IF;
END;