SQL-CASESTUDY

Urvashi Dhakan

Case study topic- Menstrual Management System

Aim: To be flexible and to increase the access to approach the doctor during the periods.

Why ?

- ✓ **Menstrual Management enables women and girls to reach their full potential**
- ✓ **it's a good idea to go to the gyno during your periods.**
- ✓ **This would be the ideal time for a health care provider to see what's happening in the body.**

There are four tables we have created

1) **MENSTRUAL_PHASES**:

- This table consist of details menstrual phase which will contain information like PHASE_NO, PHASE_NAME, FLOW_DURATION, SYMPTOMS.
- Column PHASE_NO is a primary key which do not accepts duplicate value and null value.

2) **GYNEC_INFO**:

- This table consist of details of gynecologist's information.
- It contains information like G_NO, G_NAME, G_AGE, PHASE_SPECIAL, G_EXPERIENCE, G_CONTACT, G_BRANCH.
- Column G_NO is a primary key which do not accepts duplicate value
- Column G_CONTACT is unique key which do not accepts in any duplicate value.
- Column PHASE_SPECIAL is a foreign key which takes the reference of column PHASE_NO from menstrual phases table.

3) **PATIENT_INFO**:

- This table consist of details of patient information which consists P_NO, P_NAME, P_AGE, PERIOD_PHASE, P_DURATION, P_CONTACT, P_LOCATION.
- Column P_NO is a primary key which do not accepts duplicate value
- Column P_CONTACT is unique key which do not accepts in any duplicate value.
- Column PERIOD_PHASE is a foreign key which takes the reference of column PHASE_NO from menstrual phases table.

4) **APPOINTMENT:**

- This table consists details of appointments information which consists phase no, gynec no, appointment date and time etc.
- Column APPT_ID is a primary key which do not accepts duplicate value
- Column DR_ID is a foreign key which takes the reference of column G_NO from GYNEC_INFO table.
- Column PATIENT_ID is a foreign key which takes the reference of column P_NO from PATIENT_INFO table.

TABLE 1: MENSTRUAL_PHASES

create table MENSTRUAL_PHASES

(PHASE_NO int primary key auto_increment,

PHASE_NAME varchar(70),

FLOW_DURATION VARCHAR(20),

SYMPTOMS varchar(60));

Field	Type	Null	Key	Default	Extra
PHASE_NO	int(11)	No	PRI	Null	Auto_increment
PHASE_NAME	varchar(70)	Yes		Null	
FLOW_DURATION	varchar(20)	Yes		Null	
SYMPTOMS	varchar(60)	Yes		Null	

TABLE 2: GYNEC_INFO

create table GYNEC_INFO

(G_NO int not null primary key auto_increment,

G_NAME varchar(70),

G_AGE int,

PHASE_SPECIAL int,

foreign key(PHASE_SPECIAL) REFERENCES MENSTRUAL_PHASES (PHASE_NO),

G_EXPERIENCE int,

G_CONTACT varchar10) unique key,

G_BRANCH varchar(30));752JH

Field	Type	Null	Key	Default	Extra
G_NO	int(11)	No	PRI	Null	Auto_increment
G_NAME	varchar(70)	Yes		Null	
G_AGE	Int(11)	Yes		Null	
PHASE_SPECIAL	Int(11)	Yes	MUL	Null	
G_EXPERIENCE	Int(11)	No		Null	
G_CONTACT	varchar(10)	Yes	UNI	Null	
G_BRANCH	varchar(30)	Yes		Null	

TABLE 3: PATIENT_INFO

```
create table PATIENT_INFO
(P_NO int primary key auto_increment,
P_NAME varchar(30),
P_AGE int default 18,
PERIOD_PHASE int, foreign key(PERIOD_PHASE) references MENSTRUAL_PHASES(PHASE_NO),
P_DURATION VARCHAR(30)  NOT NULL,
P_CONTACT VARCHAR(10) unique key,
P_LOCATION VARCHAR (30));
```

Field	Type	Null	Key	Default	Extra
P_NO	int(11)	No	PRI	Null	Auto_increment
P_NAME	varchar(30)	Yes		Null	
P_AGE	Int(11)	Yes		Null	
PERIOD_PHASE	Int(11)	Yes	MUL	Null	
P_DURATION	Int(11)	No		Null	
P_CONTACT	varchar(10)	Yes	UNI	Null	
P_LOCATION	varchar(30)	Yes		Null	

TABLE 4: APPOINTMENT

```
create table APPOINTMENT
( APPT_ID int primary key auto_increment,
DR_ID int, foreign key(DR_ID) REFERENCES GYNEC_INFO(G_NO),
PATIENT_ID int, foreign key(PATIENT_ID) REFERENCES PATIENT_INFO(P_NO),
APPT_DATE date,
APPT_TIME time,
APPT_DURATION time);
```

Field	Type	Null	Key	Default	Extra
APPT_ID	Int(11)	No	PRI	Null	Auto_increment
DR_ID	int(11)	No	MUL	Null	
PATIENT_ID	Int(11)	No	MUL	Null	
APPT_DATE	date	Yes		Null	
APPT_TIME	time	Yes		Null	
APPT_DURATION	varchar(20)	Yes		Null	

DATA INSERTION ON TABLES:

TABLE 1: MENSTRUAL_PHASES

insert into MENSTRUAL_PHASES

(PHASE_NAME,FLOW_DURATION,SYMPTOMS) values

("menstruation","1-5","cramps,low back pain"),

("follicular","1-14","higher energy level"),

("ovulation","14","breast tenderness"),

("luteal","14-28","bloating,headache");

PHASE_NO	PHASE_NAME	FLOW_DURATION	SYMPTOMS
1	menstruation	1-5	cramps, low back pain
2	follicular	1-14	higher energy level
3	ovulation	14	breast tenderness
4	luteal	14-28	bloating, headache

TABLE 2: GYNEC_INFO

insert into GYNEC_INFO values (1001,”DR.Kanika Kalyani”,34,4,13,”7888569837”,”Borivali”);

insert into GYNEC_INFO (G_NAME, G_AGE, PHASE_SPECIAL, G_EXPERIENCE, G_CONTACT, G_BRANCH) values

("DR.Anagha Chhatrapati",36,3,15,"8456986709","Vile Parle"),

("DR.Shital S Jadhav",38,2,18,"9887563498","Kandivali"),

("DR.Vanita Raut",68,1,42,"9865774467","Powai"),

("DR.Radhika Seth",37,4,14,"8756345678","Malad");

G_NO	G_NAME	G_AGE	PHASE_ SPECIAL	G_EXPERIENCE	G_CONTACT	G_BRANCH
1001	DR.Kanika Kalyani	34	4	13	7888569837	Borivali
1002	DR.Anagha Chhatrapati	36	3	15	8456986709	Vile Parle
1003	DR.Shital S Jadhav	38	2	18	9887563498	Kandivali
1004	DR.Vanita Raut	68	1	42	9865774467	Powai
1005	DR.Radhika Seth	37	4	14	8756345678	Malad

TABLE 3: PATIENT_INFO

insert into PATIENT_INFO values

(101,” Urvashi Soni”,23,1,”1-5”,”8104613524”,” Dahisar”),

(102,” Radhika Vora”,23,2,”1-14”,”7666496760”,” Borivali”),

(103,” Bansi Patel”,27,3,”14”,”9702971612”,” Kandivali”),

(104,” Rutuja Kamble”,26,4,”14-28”,”8655770453”,” Bandra”);

P_NO	P_NAME	P_AGE	PERIOD_PHASE	P_DURATION	P_CONTACT	P_LOCATION
101	Urvashi Soni	23	1	1-5	8104613524	Dahisar
102	Radhika Vora	23	2	1-14	7666496760	Borivali
103	Bansi Patel	27	3	14	9702971612	Kandivali
104	Rutuja Kamble	26	4	14-28	8655770453	Bandra

TABLE 4: APPOINTMENT

insert into APPOINTMENT values

(1,1001,104,"2022-05-31","12:00:00","30 Min"),

(2,1005,104,"2022-06-30","01:00:00","30 Min"),

(3,1004,101,"2022-06-23","10:30:00","45 Min"),

(4,1002,103,"2022-06-03","5:00:00","1 Hour"),

(5,1003,102,"2022-06-20","4:30:00","45 Min");

APPT_ID	DR_ID	PATIENT_ID	APPT_DATE	APPT_TIME	APPT_DURATION
1	1001	104	2022-05-31	12:00:00	30 Min
2	1005	104	2022-06-30	01:00:00	30 Min
3	1004	101	2022-06-23	10:30:00	45 Min
4	1002	103	2022-06-03	05:00:00	1 Hour
5	1003	102	2022-06-20	04:30:00	45 Min

Operations that we can perform on these databases:

1. Display the info of gynec whos allotted to the patients:
   - select g.G_NAME,g.G_NO,g.G_BRANCH,p.P_NAME,p.P_NO,p.P_LOCATIO
     from gynec_info g inner join patient_info p
     on(g.PHASE_SPECIAL= p.PERIOD_PHASE);

```
+----------------------+------+------------+---------------+------+------------+
| G_NAME               | G_NO | G_BRANCH   | P_NAME        | P_NO | P_LOCATION |
+----------------------+------+------------+---------------+------+------------+
| DR.Kanika Kalyani    | 1001 | Borivali   | Rutuja Kamble |  104 | Bandra     |
| DR.Anagha Chhatrapati| 1002 | Vile Parle | Bansi Patel   |  103 | Kandivali  |
| DR.Shital S Jadhav   | 1003 | Kandivali  | Radhika Vora  |  102 | Borivali   |
| DR.Vanita Raut       | 1004 | Powai      | Uravshi Soni  |  101 | Dahisar    |
| DR.Radhika Seth      | 1005 | Malad      | Rutuja Kamble |  104 | Bandra     |
+----------------------+------+------------+---------------+------+------------+
5 rows in set (0.011 sec)
```

2. Display the info of gynecs who attending same patients:
   - select g.G_NAME,g.G_NO,g.G_BRANCH,p.P_NAME,p.P_NO,p.P_LOCATIO
     from gynec_info g inner join patient_info p
     on(g.PHASE_SPECIAL= p.PERIOD_PHASE)
     group by P_NAME;