Kingdom of Saudi Arabia
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Computer Science



Patient Record Database

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Database Report

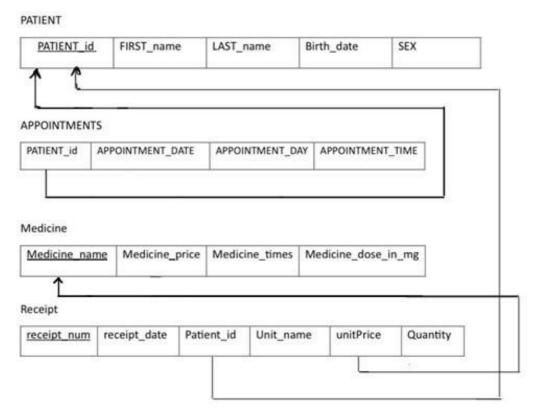
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Description of the organization:

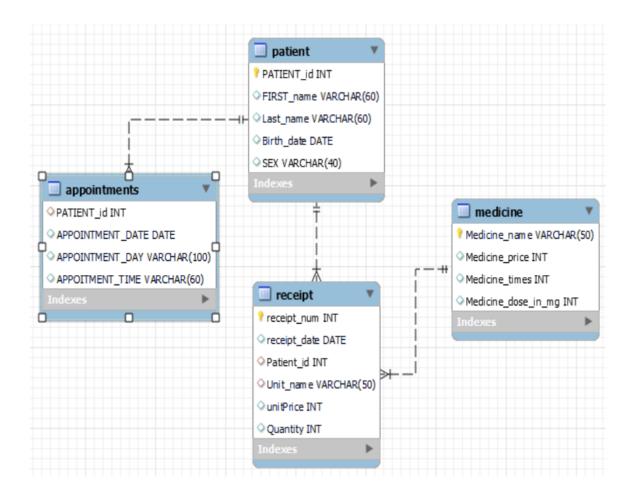
Our organization is a healthcare facility, and we deal with patient management, appointments, diagnoses, medications, and their corresponding invoices.

Our organization requires a database to store information about patients, appointments, diagnoses, medications, and their invoices. The "Patients" table would include fields such as the patient's first name, last name, date of birth, and gender. The "Appointments and Diagnoses" table would include fields like appointment date, day, time, and may also include fields to store diagnosis information. The "Medications" table would include fields such as the medication name, the time it should be taken, dosage, and price. The "Invoices" table is used to store invoice information and would include fields such as invoice number, patient number, invoice date, and the total amount due. These tables form the basic structure of the database and allow for efficient management of patient, appointment, medication, and invoice data in our organization.

Database Schema:



ERD:



Database And Tables:

Table Patient:

CREATE DATABASE PatientRecord; USE PATIENTRECORD; CREATE TABLE PATIENT(PATIENT_id int auto_increment primary key, FIRST_name varchar(60), Last_name varchar(60), Birth_date date, SEX varchar(40));

use PATIENTRECORD;

insert into PATIENT (PATIENT_id, FIRST_name,Last_name,Birth_date,SEX) values(011673894,'AHMAD','FAHAD','2019-05-20','M');

insert into PATIENT(PATIENT_id, FIRST_name,Last_name,Birth_date,SEX) values(01459656,'SAJA','HATEM','2003-01-12','F');

insert into PATIENT(PATIENT_id, FIRST_name,Last_name,Birth_date,SEX) values(018758993,'DANA','MOHAMMED','1998-09-30','F');

insert into PATIENT(PATIENT_id, FIRST_name,Last_name,Birth_date,SEX) values(019349423,'AMJAD','OMAR','2000-03-11','M');

insert into PATIENT(PATIENT_id, FIRST_name,Last_name,Birth_date,SEX) values(018645378,'NAIF','AHMAD','2006-08-18','M');

insert into PATIENT(PATIENT_id, FIRST_name,Last_name,Birth_date,SEX) values(017534289,'MANAR','MAJED','2009-02-01','F');

	PATIENT_id	FIRST_name	Last_name	Birth_date	SEX
•	1459656	SAJA	HATEM	2003-01-12	F
	11673894	AHMAD	FAHAD	2019-05-20	M
	17534289	MANAR	MAJED	2009-02-01	F
	18645378	NAIF	AHMAD	2006-08-18	M
	18758993	DANA	MOHAMMED	1998-09-30	F
	19349423	AMJAD	OMAR	2000-03-11	M
	NULL	NULL	NULL	NULL	HULL

Table Appointments:

USE PATIENTRECORD; create table APPOINTMENTS(PATIENT_id int, APPOINTMENT_DATE date, APPOINTMENT_DAY varcharacter(100), APPOITMENT_TIME varcharacter(60)); foreign key (PATIENT_id) references PATIENT (PATIENT_id));

use PATIENTRECORD;

insert into APPOINTMENTS (PATIENT_id, APPOINTMENT_DATE, APPOINTMENT_DAY, APPOITMENT_TIME) values (011673894, '24-5-2', 'THURSDAY', '5PM');

insert into APPOINTMENTS (PATIENT_id, APPOINTMENT_DATE, APPOINTMENT_DAY, APPOITMENT_TIME) values (01459656,'24-5-2','THURSDAY','7PM');

insert into APPOINTMENTS (PATIENT_id, APPOINTMENT_DATE, APPOINTMENT_DAY, APPOITMENT_TIME) values (018758993, '24-5-3', 'FRIDAY', '1PM');

insert into APPOINTMENTS(PATIENT_id, APPOINTMENT_DATE, APPOINTMENT_DAY, APPOITMENT_TIME) values (019732799, '24-5-3', 'FRIDAY', '4PM');

insert into APPOINTMENTS (PATIENT_id, APPOINTMENT_DATE, APPOINTMENT_DAY, APPOITMENT_TIME) values(017534289,'24-5-4','SATURDAY','2PM');

insert into APPOINTMENTS (PATIENT_id, APPOINTMENT_DATE, APPOINTMENT_DAY, APPOITMENT_TIME) values (018645378, '24-5-4', 'SATURDAY', '5PM')

PATIENT_id	APPOINTMENT_DATE	APPOINTMENT_DAY	APPOITMENT_TIME
11673894	2024-05-02	THURSDAY	5PM
1459656	2024-05-02	THURSDAY	7PM
18758993	2024-05-03	FRIDAY	1PM
19349423	2024-05-03	FRIDAY	4PM
17534289	2024-05-04	SATURDAY	2PM
18645378	2024-05-04	SATURDAY	5PM

Table Medicine:

USE PATIENTRECORD;

SELECT * FROM Medicine;

SELECT Medicine name FROM Medicine;

SELECT Medicine_price FROM Medicine WHERE Medicine_price BETWEEN 10 AND 30;

SELECT * FROM Medicine

WHERE Medicine_name IN ('Fevadol');

SELECT * FROM Medicine

WHERE Medicine_name LIKE "Pana%";

use PATIENTRECORD;

INSERT INTO Medicine (Medicine_name, Medicine_price, Medicine_times, Medicine dose in mg)

VALUES ('Panadol', 15, 3, 500);

INSERT INTO Medicine (Medicine_name, Medicine_price, Medicine_times, Medicine dose in mg)

VALUES ('PanadolExtra', 30, 2, 750);

INSERT INTO Medicine (Medicine_name, Medicine_price, Medicine_times, Medicine_dose_in_mg)

VALUES ('Fevadol', 10, 6, 250);

INSERT INTO Medicine (Medicine_name, Medicine_price, Medicine_times, Medicine_dose_in_mg)

VALUES ('Rofinac', 40, 2, 1000);

INSERT INTO Medicine (Medicine_name, Medicine_price, Medicine_times, Medicine_dose_in_mg)

VALUES ('Voltaren', 20, 7, 250);

INSERT INTO Medicine (Medicine_name, Medicine_price, Medicine_times, Medicine_dose_in_mg)

VALUES ('MEBO', 25, 4, 750);

	Medicine_name	Medicine_price	Medicine_times	Medicine_dose_in_mg
١	Fevadol	10	6	250
	Panadol	15	3	500
	Voltaren	20	7	250
	MEBO	25	4	750
	PanadolExtra	30	2	750
	Rofinac	40	2	1000
	NULL	NULL	NULL	NULL

Table Receipt:

use PATIENTRECORD;

CREATE TABLE receipt (

receipt_num int auto_increment primary key,

receipt_date date,

Patient_id int,

Unit name varchar(50),

unitPrice int,

Quantity int,

foreign key (PATIENT_id) references PATIENT (PATIENT_id),

foreign key (Unit_name) references Medicine (Medicine_name));

USE PATIENTRECORD;

insert into receipt (receipt_num, receipt_date, Patient_id, Unit_name, unitPrice, Quantity)

values (1,'24-5-2',011673894, 'Panadol', 15, 3);

insert into receipt (receipt_num, receipt_date, Patient_id, Unit_name, unitPrice, Quantity)

values (2,'24-5-2',01459656, 'PanadolExtra', 30, 1);

insert into receipt (receipt_num, receipt_date, Patient_id, Unit_name, unitPrice, Ouantity)

values (3,'24-5-3',018758993, 'Fevadol', 10, 5);

insert into receipt (receipt_num, receipt_date, Patient_id, Unit_name, unitPrice, Ouantity)

values (4,'24-5-3',019349423, 'Rofinac', 40, 2);

insert into receipt (receipt_num, receipt_date, Patient_id, Unit_name, unitPrice, Quantity)

values (5,'24-5-4',018645378, 'Voltaren', 20, 1);

insert into receipt (receipt_num, receipt_date, Patient_id, Unit_name, unitPrice, Quantity)

values (6,'24-5-4',017534289, 'MEBO', 25, 4);

	receipt_num	receipt_date	Patient_id	Unit_name	unitPrice	Quantity
Þ	1	2024-05-02	11673894	Panadol	15	3
	2	2024-05-02	1459656	PanadolExtra	30	1
	3	2024-05-03	18758993	Fevadol	10	5
	4	2024-05-03	19349423	Rofinac	40	2
	5	2024-05-04	18645378	Voltaren	20	1
	6	2024-05-04	17534289	MEBO	25	4
	NULL	NULL	NULL	NULL	NULL	NULL

Queries:

Patient:

use PATIENTRECORD; select * from PATIENT; select FIRST_NAME ,LAST_NAME from PATIENT;

select FIRST_NAME AS "PATIENT NAME" FROM PATIENT; select substring(fIRST_NAME, 1,4) from PATIENT;

use PATIENTRECORD; select count(FIRST_NAME) from PATIENT;

use PATIENTRECORD; select PATIENT_id,FIRST_name, Last_name, Birth_date, SEX FROM PATIENT where PATIENT_id = (select PATIENT_id FROM PATIENT where PATIENT_id = '019349423'); use PATIENTRECORD;

Appointments:

use PATIENTRECORD; select * from APPOINTMENTS; select APPOINTMENT_DATE,APPOINTMENT_DAY from APPOINTMENTS;

use PATIENTRECORD; select ALL PATIENT_id ,APPOINTMENT_DATE ,APPOINTMENT_DAY,APPOITMENT_TIME from APPOINTMENTS where APPOINTMENT_DAY ='SATURDAY';

use PATIENTRECORD; select ALL PATIENT_id ,APPOINTMENT_DATE ,APPOINTMENT_DAY,APPOITMENT_TIME from APPOINTMENTS where APPOINTMENT_DATE='24-5-3';

Medicine:

SELECT * FROM Medicine; SELECT Medicine_name FROM Medicine; SELECT Medicine_price FROM Medicine WHERE Medicine_price BETWEEN 10 AND 30; SELECT * FROM Medicine WHERE Medicine_name IN ('Fevadol'); SELECT * FROM Medicine WHERE Medicine_name LIKE "Pana%";

Receipt:

USE PATIENTRECORD; select unitPrice * Quantity FROM receipt; select Medicine_dose_in_mg ,max(unitPrice) from Medicine ,receipt

where Medicine_price = unitPrice group by Medicine_dose_in_mg; SELECT * FROM receipt;