



-- The Medication Tracker System database helps manage patient treatment and medication schedules. It allows both patients and doctors to easily track medications, and other important patient details.

-- <https://stackoverflow.com/questions/20958/list-of-standard-lengths-for-database-fields#:~:text=I%20just%20queried,length%20was%2035>.

```
create table dr (
    id int auto_increment primary key,
    name varchar(100), #Comine of first and last
    gender varchar(6) check ( gender = 'male' or gender = 'female' ),
    email varchar(62),
    specialization varchar(50),
    experience int,
    department varchar(50)
);

create table patient (
    id int auto_increment primary key,
    name varchar(100),
    gender varchar(6) check ( gender = 'male' or gender = 'female' ),
    email varchar(62),
    phone_number varchar(10),
    emergency_contact varchar(10),
    diagnosis varchar(255),
    dr_id int unique,
    foreign key (dr_id) references dr(id)
);
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create table address (
    id int primary key,
    city varchar(20),
    state varchar(20),
    neighbourhood varchar(15),
    street varchar(62),
    postal_code varchar(6),
    address_type varchar(4) check ( address_type = 'home' or address_type =
'work' ),
    patient_id int unique,
    foreign key (patient_id) references patient(id)
);

create table pharmacy (
    id int primary key,
    name varchar(30),
    location varchar(255),
    contact_number varchar(10)
);

create table medication (
    id int auto_increment primary key,
    name varchar(35),
    scientific_name varchar(100),
    drug_type varchar(15),
    med_category varchar(50),
    start_date date,
    end_date date,
    frequency varchar(15),
    instructions varchar(255),
    dr_id int unique,
    medication_id int unique,
    patient_id int unique,
    foreign key (dr_id) references dr(id),
    foreign key (medication_id) references medication(id),
    foreign key (patient_id) references patient(id)
);

create table appointment (
    id int auto_increment primary key,
    appointment_date date,
    appointment_time time,
    status varchar(9) check ( status = 'Scheduled' or status = 'Completed'),
    patient_id int unique,
    dr_id int unique,
    foreign key (patient_id) references patient(id),
    foreign key (dr_id) references dr(id)
);

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-- Inserting data into the dr table
insert into dr (name, gender, email, specialization, experience, department)
values
('Dr. Khaled', 'male', 'khaled@gmail.com', 'Orthopedics', 15, 'Orthopedics'),
('Dr. Nourah', 'female', 'nourah@gmail.com', 'Pediatrics', 10, 'Pediatrics'),
('Dr. Othman', 'male', 'Othman@gmail.com', 'Gastroenterology', 18,
'Gastroenterology'),
('Dr. Sara', 'female', 'Sara@gmail.com', 'Obstetrics', 7, 'Obstetrics');

-- Inserting data into the patient table
insert into patient (name, gender, email, phone_number, emergency_contact,
diagnosis, dr_id)
values
('Omar', 'male', 'omar@gmail.com', '0503456789', '0509876543', 'Fracture',
3),
('Lama', 'female', 'lama@gmail.com', '0504567890', '0508765433', 'Asthma',
4),
('Sami', 'male', 'sami@gmail.com', '0505678901', '0507654324', 'Digestive
Disorder', 5),
('Salma', 'female', 'salma@gmail.com', '0506789012', '0506543212',
'Pregnancy', 6);

-- Inserting data into the address table
insert into address (city, state, neighbourhood, street, postal_code,
address_type, patient_id)
values
('Riyadh', 'Riyadh', 'Al-Rimal', 'Prince Saud Al-Faisal St.', '13731',
'home', 3),
('Dammam', 'Eastern Province', 'Al-Khobar', 'King Saud Rd. Al-Jubail',
'32215', 'work', 4),
('Makkah', 'Makkah', 'Al-Shuhada', 'Shuhada St. Behind Al-Haram', '23456',
'home', 5),
('Medina', 'Medina', 'Al-Masjid', 'Al-Masjid Al-Nabawi St.', '41566', 'work',
6);

-- Inserting data into the pharmacy table
insert into pharmacy (name, location, contact_number)
values
('United Pharmacy', 'King Abdulaziz Rd, Riyadh', '0112345555'),
('Al-Dawaa Pharmacy', '1025 St, Makkah', '0125556666'),
('Al-Manar Pharmacy', 'Jeddah Corniche', '0123450000'),
('Al-Nahdi Express', 'Dhahran St, Dammam', '0132344000');

-- Inserting data into the medication table
insert into medication (name, scientific_name, drug_type, med_category,
start_date, end_date, frequency, instructions, dr_id, patient_id)
values
('Ibuprofen', 'Ibuprofen', 'NSAID', 'Pain Relief', '2024-02-01', '2024-08-
01', 'Twice a day', 'Take with food', 3, 3),
('Ventolin', 'Salbutamol', 'Bronchodilator', 'Respiratory', '2024-01-01',
'2024-06-30', 'As needed', 'Inhale as directed', 4, 4),
('Omeprazole', 'Omeprazole', 'Proton Pump Inhibitor', 'Gastrointestinal',
'2024-03-01', '2024-12-31', 'Once a day', 'Take before breakfast', 5, 5),
('Folic Acid', 'Folic Acid', 'Vitamin', 'Supplement', '2024-04-01', '2024-06-
30', 'Once a day', 'Take with a meal', 6, 6);

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-- Inserting data into the appointment table
insert into appointment (appointment_date, appointment_time, status,
patient_id, dr_id)
values
('2024-03-10', '10:00:00', 'Scheduled', 3, 3),
('2024-04-12', '14:00:00', 'Scheduled', 4, 4),
('2024-05-15', '08:30:00', 'Completed', 5, 5),
('2024-06-18', '13:15:00', 'Completed', 6, 6);

-- Update Dr. Khaled experience to 16 years
update dr
set experience = 16
where email = 'khaled@gmail.com';

-- Delete Dr. Othman from the 'dr' table
delete from dr
where email = 'tariq@gmail.com';

-- Update Sami diagnosis to Psoriasis
update patient
set diagnosis = 'Psoriasis'
where email = 'sami@gmail.com';

-- Delete Omar from the patient table
delete from patient
where email = 'omar@gmail.com';

-- Update the postal code for patient 3 address to 41567
update address
set postal_code = '41567'
where patient_id = 3;

-- Delete the address of patient from the 'address' table
delete from address
where patient_id = 4;

-- Update the contact number of Al-Dawaa Pharmacy to 8002444445
update pharmacy
set contact_number = '8002444445'
where name = 'Al-Dawaa Pharmacy';

-- Delete Al-Manar Pharmacy from the pharmacy table
delete from pharmacy
where name = 'Al-Manar Pharmacy';

-- Update the frequency of Atenolol medication to Twice a day
update medication
set frequency = 'Twice a day'
where name = 'Atenolol';

-- Delete the Ventolin medication from the medication table
delete from medication
where name = 'Ventolin';
```

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-- Update the appointment status for patient 2 to Scheduled
update appointment
set status = 'Scheduled'
where patient_id = 2;

-- Delete the appointment of patient 3 from the appointment table
delete from appointment
where patient_id = 3;
```