Relational Schema (Top Diagram)

Admissions
PK AdmissionID
FK patientID
FK DoctorID
DataAdmitted
Datacharged
Reason

patient phone
PK patientID
phone

Appointments
Date
PK AppointmentID
FK patientID
Time
FK DoctorID

Doctor_contact
FK DoctorID
contactID
(pk)

patient
PK patientID
full_name
gender
DOB
Address
Age

Bill
PK Bill_ID
Room_chargers
doc_chargers
doc_chargers
medicine_chargers
FK patientID

Doctors
PK DoctorID
Name
Address
specialization
staff_ID
FK DepartmentID

surgeries
PK surgeyID
Time
Date
FK DoctorID
FK patient ID
FK RoomID

Departments
PK DepartmentID
Name
location

payment
PK paymentID
FK Bill_ID
type
status

Nursesurgey
FK surgeyID
FK NurseID
(pk)

Rooms
PK RoomID
location
FK patientID
type
status

Description
PK DiscID
FK PatientID
Surgeries
description
desc_data
FK DoctorID

prescription
PK prescriptionID
FK patientID
FK Desc_ID

pre_med
FK prescriptionID
FK MED_ID
Dosage
(PK)

Medicine
PK MED_ID
Name
price
quantity

Nurses
PK NurseID
Name
Gender
Address
FK DepartmentID

nurse_contact
FK nurseID
contact

NurseRoom
FK RoomID
FK NurseID
(pk)

ER Diagram (Bottom Diagram)

Admission entity attributes: PatientID, DateDischarged, Reason, AdmissionID, DateAdmitted

Appointment entity attributes: PatientID, DoctorID, Time, AppointmentID, Date

Doctor entity attributes: First_name, Last_name, Name, DoctorID, city, grov, building, street, Address, Specialization, DepartmentID, Contact

Patient entity attributes: First_name, Last_name, Name, Gender, DOB, Phone, PatientID, Address (grov, city, street, building), Age, PatientID, Bill_ID

Bill entity attributes: room_chargers, medicine_chargers, doc_chargers

Payment entity attributes: payment_ID, status, Type

Medicine entity attributes: PrescriptionID, Med_ID, price, Quantity, Name

Surgery entity attributes: PatientID, DoctorID, SurgeryID, Type, Time, Date

Department entity attributes: DepartmentID, Name, Location

Nurse entity attributes: Contact, Gender, grov, city, building, street, Address, NurseID, Name, Last_name, First_name, DepartmentID

Room entity attributes: PatientID, Type, RoomID, Location, Status, surgeries

Description entity attributes: Desc_ID, PatientID, desc_data, DoctorID, description

Prescription entity attributes: Desc_ID, PatientID, MedicationID, PrescriptionID, Dosage

Tables:

Patient:

PatientID: Unique identifier for each patient.

full_name: Full name of the patient.

Gender: Gender of the patient.

DOB: Date of birth of the patient.

Address: Address of the patient.

Age: Age of the patient.

Departments:

DepartmentID: Unique identifier for each department.

Name: Name of the department.

Location: Location of the department.

Doctors:

DoctorID: Unique identifier for each doctor.

Name: Name of the doctor.

Specialization: Specialization of the doctor.

Address: Address of the doctor.

DepartmentID: Identifier of the department the doctor belongs to (foreign key).

Nurses:

NurseID: Unique identifier for each nurse.

Name: Name of the nurse.

Gender: Gender of the nurse.

Address: Address of the nurse.

DepartmentID: Identifier of the department the nurse belongs to (foreign key).

Rooms:

RoomID: Unique identifier for each room.

Location: Location of the room.

PatientID: Identifier of the patient assigned to the room (foreign key).

Type: Type of the room.

Status: Current status of the room.

Nurse_Room:

RoomID: Identifier of the room (foreign key).

NurseID: Identifier of the nurse assigned to the room (foreign key).

PRIMARY KEY: Combination of NurseID and RoomID.

Medicine:

Med_ID: Unique identifier for each medicine.

Name: Name of the medicine.

Price: Price of the medicine.

Quantity: Quantity available.

Prescription:

PrescriptionID: Unique identifier for each prescription.

PatientID: Identifier of the patient (foreign key).

Desc_ID: Identifier of the description (foreign key).

Bill:

Bill_ID: Unique identifier for each bill.

PatientID: Identifier of the patient (foreign key).

room_chargers: Charges for room.

doc_chargers: Charges for doctor's services.

medicine_chargers: Charges for medicines.

Payment:

payment_ID: Unique identifier for each payment.

Bill_ID: Identifier of the bill (foreign key).

Type: Type of payment.

Status: Payment status.

Admissions:

AdmissionID: Unique identifier for each admission.

PatientID: Identifier of the patient (foreign key).

DoctorID: Identifier of the doctor (foreign key).

DateAdmitted: Date of admission.

DateDischarged: Date of discharge.

Reason: Reason for admission.

Appointments:

AppointmentID: Unique identifier for each appointment.

PatientID: Identifier of the patient (foreign key).

DoctorID: Identifier of the doctor (foreign key).

Date: Date of appointment.

Time: Time of appointment.

Surgeries:

SurgeryID: Unique identifier for each surgery.

DoctorID: Identifier of the doctor (foreign key).

PatientID: Identifier of the patient (foreign key).

Date: Date of surgery.

Time: Time of surgery.

Type: Type of surgery.

RoomID: Identifier of the room (foreign key).

Patient_Phone:

PatientID: Identifier of the patient (foreign key).

Phone: Phone number of the patient.

PRIMARY KEY: Combination of PatientID and Phone.

Doctor_cont:

DoctorID: Identifier of the doctor (foreign key).

contact: Contact information of the doctor.

PRIMARY KEY: Combination of DoctorID and contact.

Nurse_cont:

NurseID: Identifier of the nurse (foreign key).

contact: Contact information of the nurse.

PRIMARY KEY: Combination of NurseID and contact.

Description:

Desc_ID: Unique identifier for each description.

PatientID: Identifier of the patient (foreign key).

DoctorID: Identifier of the doctor (foreign key).

surgeries: Indicator for surgeries.

description: Description of the patient.
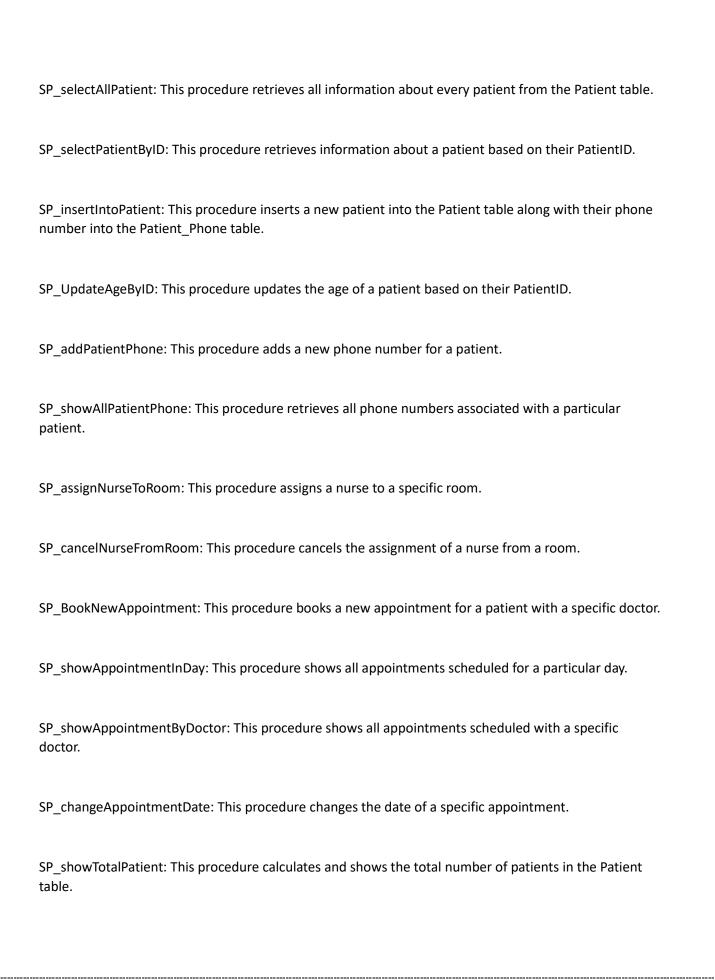
desc_date: Date of description.

pre_med:

MED_ID: Identifier of the medicine (foreign key).

Pre_ID: Identifier of the prescription (foreign key).

Dosage: Dosage of the medicine.

PRIMARY KEY: Combination of MED_ID and Pre_ID.

Nursesurgey:

NurseID: Identifier of the nurse (foreign key).

surgeryID: Identifier of the surgery (foreign key).

PRIMARY KEY: Combination of NurseID and surgeryID.

SP_selectAllPatient: This procedure retrieves all information about every patient from the Patient table.

SP_selectPatientByID: This procedure retrieves information about a patient based on their PatientID.

SP_insertIntoPatient: This procedure inserts a new patient into the Patient table along with their phone number into the Patient_Phone table.

SP_UpdateAgeByID: This procedure updates the age of a patient based on their PatientID.

SP_addPatientPhone: This procedure adds a new phone number for a patient.

SP_showAllPatientPhone: This procedure retrieves all phone numbers associated with a particular patient.

SP_assignNurseToRoom: This procedure assigns a nurse to a specific room.

SP_cancelNurseFromRoom: This procedure cancels the assignment of a nurse from a room.

SP_BookNewAppointment: This procedure books a new appointment for a patient with a specific doctor.

SP_showAppointmentInDay: This procedure shows all appointments scheduled for a particular day.

SP_showAppointmentByDoctor: This procedure shows all appointments scheduled with a specific doctor.

SP_changeAppointmentDate: This procedure changes the date of a specific appointment.

SP_showTotalPatient: This procedure calculates and shows the total number of patients in the Patient table.

SP_totalBenfits: This procedure calculates and shows the total charges for rooms, doctors, and medicines from the Bill table.

SP_causeDescription: This procedure retrieves the names of doctors, their IDs, associated patient IDs, and descriptions of patients' conditions from the Doctors and Description tables.