HOSPITAL MANAGEMENT SYSTEM(HMS)

1 . PURPOSE OF HMS:

The hospital management system is used for managing events in hospital and recording information of staff and visiting patients.

The purpose of HMS schema is to store the following :

i . informations of users with different roles in a hospital like doctor , nurse , surgeon , maintanance people.

ii . Details of patients , along with doctor they visited and nurse assigned.

iii . Billing information of patient for particular visited date.

2. TABLES IN SCHEMA:

roles(roleId (PK), roleName)

Description : roles table stores roleId which is primary key and rolename ,
stores different roles in hospital like doctor, nurse , watchman , manager etc..

address(addr_id (PK), pincode , city , state , country)

Description : address table storess address details like pincode, city , state , country with addr_id as primary key.

users(userId (PK) , firstName ,lastName , gender , mobileNumber, addr_id(FK))

Description : users table stores details of registered users of the management system , which can be doctors , nurses etc.
Every user is given userId which is primary key and details stored are firstname , lastname , gender , mobile number and addr_id which is foreign key referencing address table , it will be many to one relationship with address table.

role_user(user_role_id (PK),salary , designation ,created, userId(FK),roleId(FK))

Description : role_user is a junction table between users and roles ,

user_role_id is a primary key, userId and roleId are foriegn keys ,
other fields are salary , designation , created .
This table stores the history also as the role got changed for user , instead of updating , new data row is added along with date. So history is preserved.

room(room_no(PK),roomType,status)

Description : room table stores details of rooms for patients in hospital

. patient(patient_id(PK),patient_name ,age ,gender ,registed_on, addr_id)

Description : patient table has details of patient visited hospital with patient_id as primary key

inpatient(id(PK),disease,patient_id(FK),room_no(FK),doctor_id(FK), nurse_id(FK) ,date_of_admission,date_of_discharge date)

Description : inpatient table stores details of patient who gets admit in hospita; for treatment ,with id as primary key , and patient_id is foriegn key referes to patient table , room_no is foriegn key referes to room table,
doctor_id and nurse_id refers to role_user table with additional information like date of admission , date of discharge and disease.

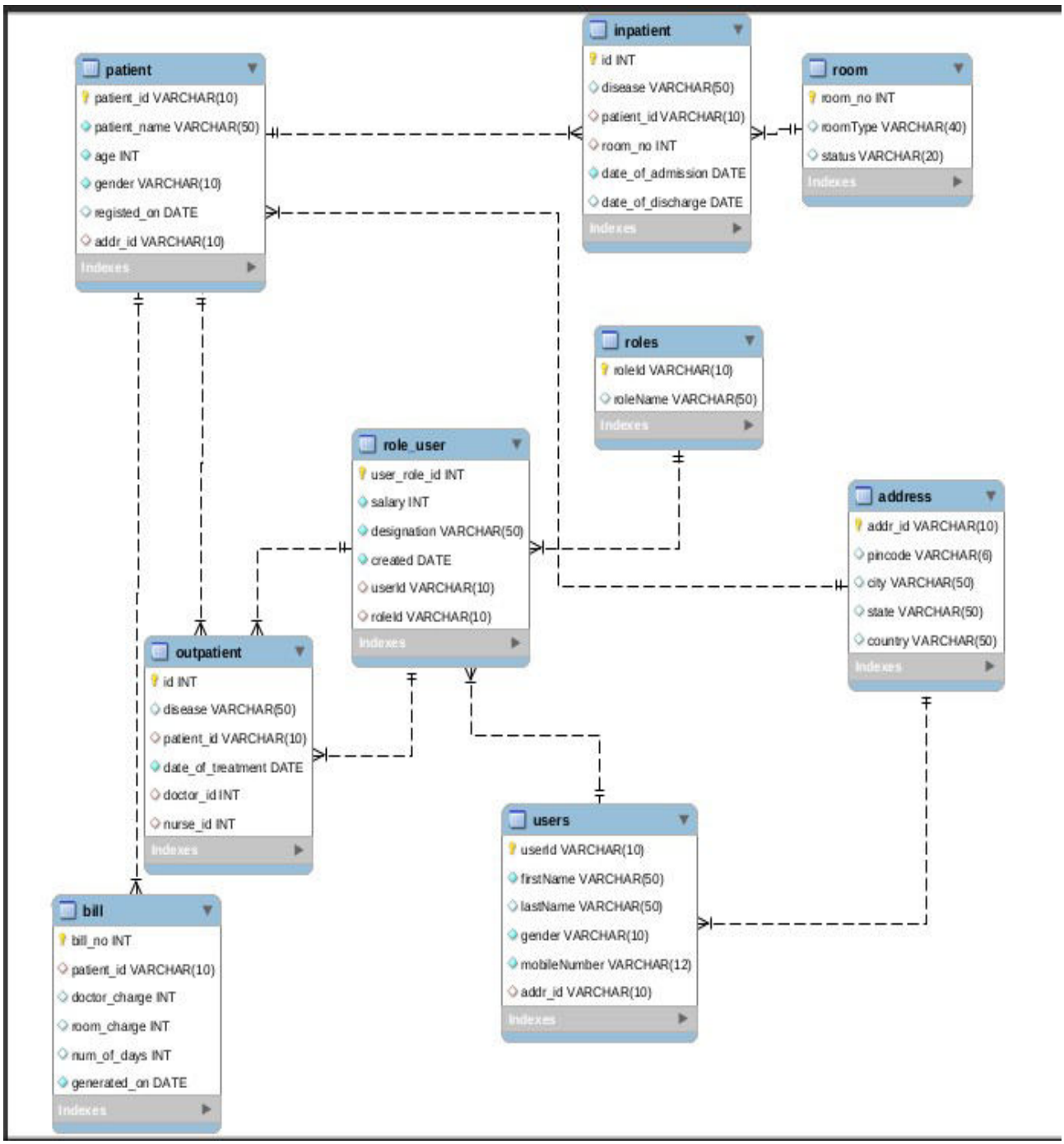
outpatient(id(PK),disease,patient_id(FK),doctor_id(FK),nurse_id(FK) ,date_of_treatment)

Description : inpatient table stores details of patient who visits hospital for treatment ,with id as primary key , and patient_id is foriegn key referes to patient table , doctor_id and nurse_id refers to role_user table with additional information like date_of_treatment and disease.

Bill(bill_no(PK) , patient_id (FK), doctor_charge , room_charge , num_of_days , generated_on)

Description : bill table stores details of bill generated for patient with bill_no as primary key and patient_id as foriegn key with many-to-one relationship , additional attributes includes doctor_charge , room_charge, num_of days , generated on which stored date.

3.ER DIAGRAM:


patient
patient_id VARCHAR(10)
patient_name VARCHAR(50)
age INT
gender VARCHAR(10)
registed_on DATE
addr_id VARCHAR(10)
Indexes
inpatient
id INT
disease VARCHAR(50)
patient_id VARCHAR(10)
room_no INT
date_of_admission DATE
date_of_discharge DATE
Indexes
room
room_no INT
roomType VARCHAR(40)
status VARCHAR(20)
Indexes
roles
roleId VARCHAR(10)
roleName VARCHAR(50)
Indexes
role_user
user_role_id INT
salary INT
designation VARCHAR(50)
created DATE
userId VARCHAR(10)
roleId VARCHAR(10)
Indexes
address
addr_id VARCHAR(10)
pincode VARCHAR(6)
city VARCHAR(50)
state VARCHAR(50)
country VARCHAR(50)
Indexes
outpatient
id INT
disease VARCHAR(50)
patient_id VARCHAR(10)
date_of_treatment DATE
doctor_id INT
nurse_id INT
Indexes
users
userId VARCHAR(10)
firstName VARCHAR(50)
lastName VARCHAR(50)
gender VARCHAR(10)
mobileNumber VARCHAR(12)
addr_id VARCHAR(10)
Indexes
bill
bill_no INT
patient_id VARCHAR(10)
doctor_charge INT
room_charge INT
num_of_days INT
generated_on DATE
Indexes