

Data base Management System Project

ADVANCED PHARMACY MANAGEMENT SYSTEM

Team Mates :

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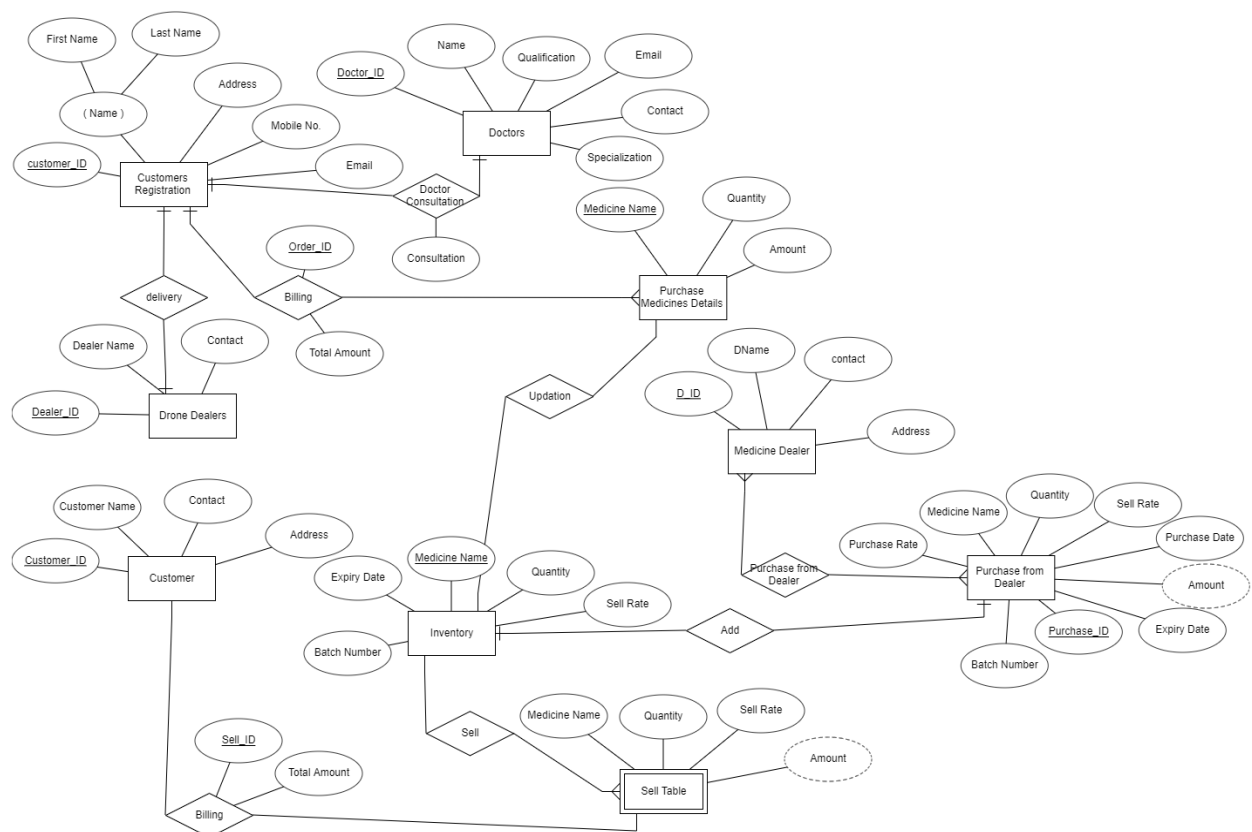
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Problem Statement:-

As this Pandemic is going on now, it is not safe to buy medicines by going to the pharmacy shop at this time. so we also provide online service to order medicines and trying to deliver them Using Drones So That Human contact can be Reduced. Along with that Consultation with doctors is also very difficult at this time. Therefore, we provide service to Consult with the doctors online.

Design A Data-Base to Manage the **Advanced Pharmacy system** with these Additional services?

ER Diagram:



ASSUMPTIONS:-

1. Customer_Registration table is used to store the data of Online customers.
2. Customer Table is used to store the data of Offline Customers.
3. Inventory table is used to store the data of Currently Available Medicines with their Quantity.

Schema:-

DOCTOR(Doctor_ID(PK),Name,Email,Contact,Specialization,Qualification,customer_ID(FK))

Customer_Registration(customer_ID(PK),FirstName,LastName,Address,Mobile No. , Email)

Purchase_Medicines_Details(MedicineName(PK),Quantity,Amount,cutomer_ID(FK),order_ID(FK),Medicine Name(FK))

Billing(order_ID,TotalAmount,customer_ID(FK))

Drone Dealers(Dealer_ID(PK),Dealer Name,Contact, customer_ID(FK))

Medicine Dealer(D_ID(PK),DName,Contact,Address)

Purchase from Dealer(D_ID(FK),Purchase_ID(FK))

Purchase Medicines Data(Purchase_ID(PK),Quantity,PurchaseRate,SellRate,Purchase Date, Expiry Date ,Batch Number,Medicine Name(FK))

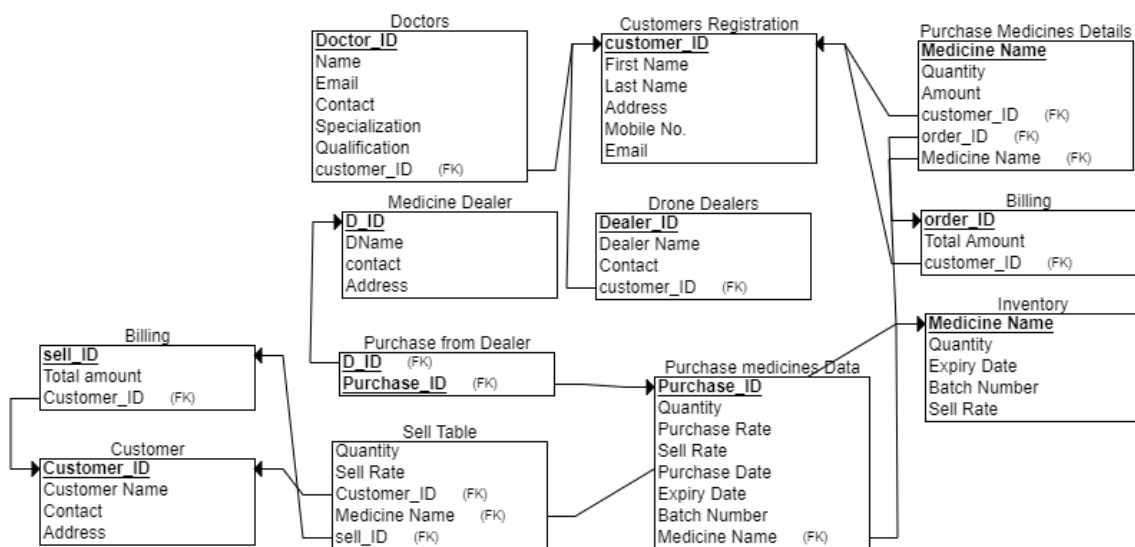
Inventory(Medicine Name(PK),Quantity,Expiry Date, Batch Number,Sell Rate)

Sell Table(Quantity,SellRate,Customer_ID(FK),Medicine Name(FK),Sell_ID(FK))

Customer(Customer_ID(PK),Customer Name,Contact, Address)

Billing(sell_ID(PK),TotalAmount,Customer_ID(FK))

Relational Schema:-



Normalisation:-

1. DOCTOR(Doctor_ID(PK),Name,Email,Contact,Specialization,Qualification,customer_ID(FK))

Doctor_ID -> Name

Doctor_ID ->Email
Doctor_ID ->Contact
Doctor_ID ->Specialisation
Doctor_ID ->Qualification
Email -> Contact

Candidate Key – Doctor_ID
This is in 1NF,2NF but not in 3NF.

Doctor_ID -> Email and Email -> Name

Email is a non-prime Attribute that's why it's not in 3NF

Doctor1(Doctor_ID(PK),Specialization,Qualification,customer_ID(FK))
This is in 3NF form
Doctor2(Email(PK), Contact)
This is in 3NF form

2. Customer_Registration(customer_ID(PK),FirstName,LastName,Address,Mobile No. , Email)

Customer_ID -> Name
Customer_ID ->Address
Customer_ID ->Mobile No.
Customer_ID ->Email

Candidate Key –Customer_ID
This is in 1NF,2NF and 3NF.

3. Purchase_Medicines_Details(MedicineName(PK),Quantity,Amount,customer_ID(FK),order_ID(FK),Medicine Name(FK))

Medicine_Name -> Quantity
Medicine Name ->Amount
Medicine Name ->customer_ID
Medicine Name ->order_ID

Candidate key – Medicine Name
This in 1NF,2NF and 3NF

4. Billing(order_ID,TotalAmount,customer_ID(FK))

Order_ID -> Total Amount
Order_ID ->customer_ID

Candidate key – order_ID

This is in 1NF ,2NF and 3NF.

5. Drone Dealers(Dealer_ID(PK),Dealer Name,Contact, customer_ID(FK))

Dealer_ID -> Dealer Name
Dealer_ID -> Contact
Customer_ID -> Dealer_Name

Candidate key – Dealer_ID
This is in 1NF ,2NF but not in 3NF.

Drone Dealers1(Dealer_ID(PK),DealerName,Contact)
Drone Dealers2(Customer_ID,Dealer_ID)

6. Medicine Dealer(D_ID(PK),DName,Contact,Address)

D_ID ->D_Name
D_ID -> Contact
D_ID -> Address

Candidate key – D_ID
This is in 1NF , 2NF and 3NF.

7. Purchase from Dealer(D_ID(FK),Purchase_ID(FK))
D_ID ->Purchase_ID

Candidate key – D_ID
This is in 1NF,2NF and 3NF.

8. Purchase Medicines Data(Purchase_ID(Pk),Quantity,PurchaseRate,SellRate,Purchase Date, Expiry Date ,Batch Number,Medicine Name(FK))

Purchase_ID -> Quantity
Purchase_ID -> Purchase Rate
Purchase_ID -> Sell Rate
Purchase_ID -> Purchase Date
Purchase_ID ->Expiry_Date
Purchase_ID -> Batch Number
Purchase_ID -> MedicineName
Medicine_Name ->Quantity
Medicine Name -> Sell Rate
Medicine Name -> Expiry Date
Purchase Date ->Purchase_ID

Candidate Key – Purchase_ID,(Medicine Name,Purchase Date)

This is in 1NF ,2NF but not in 3NF.

Purchase Medicines Data1(Purchase_ID(Pk),Purchase Date)
Purchase Medicines Data2(Medicine Name(PK),Sell Rate,ExpiryDate,Batch Number,)

Now These are in 3NF

9. Inventory(Medicine Name(PK),Quantity,Expiry Date, Batch Number,Sell Rate)

Medicine Name ->Quantity
Medicine Name -> Expiry Date
Medicine Name -> Batch Number
Medicine Name -> Sell Rate

This is in 1NF ,2NF and 3NF.

10. Sell Table(Quantity,SellRate,Customer_ID(FK),Medicine Name(FK),Sell_ID(FK))

Customer_ID->Sell_ID
Medicine Name -> Sell Rate
Medicine Name -> Quantity

Candidate keys – Medicine Name ,Customer_ID

This is not in 2NF.

Sell Table1(Quantity,SellRate,Customer_ID(FK),Medicine Name(FK))
Sell Table2(Customer_ID(FK),Sell_ID(FK))

This is in 3NF.

11. Customer(Customer_ID(PK),Customer Name,Contact, Address)

Customer_ID ->customer_Name
Customer_ID -> Contact
Customer_ID -> Address

Candidate key – Customer_ID.

This in 1NF,2NF and 3NF.

12. Billing(sell_ID(PK),TotalAmount,Customer_ID(FK))

Sell_ID -> Total Amount
Sell_ID ->customer_ID

Candidate key – Sell_ID

This is in 1NF ,2NF and 3NF.

Create Tables SQL Commands:

```
CREATE TABLE Customers_Registration  
(  
First_Name varchar2(20) NOT NULL,  
Last_Name varchar2(20),
```

```
Address varchar2(40),
Mobile_No. number(10) NOT NULL,
Email varchar2(20) NOT NULL,
customer_ID INT NOT NULL,
PRIMARY KEY (customer_ID)
);
```

```
CREATE TABLE Customer
(
Customer_Name varchar2(20) NOT NULL,
Contact_ varchar2(20) NOT NULL,
Address varchar2(20) ,
Customer_ID INT NOT NULL,
PRIMARY KEY (Customer_ID)
);
```

```
CREATE TABLE Medicine_Dealer
(
DName varchar2(20) NOT NULL,
contact number(10) NOT NULL,
Address varchar2(20) NOT NULL,
D_ID INT NOT NULL,
PRIMARY KEY (D_ID)
);
```

```
CREATE TABLE Inventory
(
Medicine_Name varchar2(20) NOT NULL,
Quantity INT NOT NULL,
Expiry_Date Date NOT NULL,
Batch_Number INT NOT NULL,
Sell_Rate INT NOT NULL,
PRIMARY KEY (Medicine_Name)
);
```

```
CREATE TABLE Billing
(
order_ID INT NOT NULL,
Total_Amount INT NOT NULL,
customer_ID INT NOT NULL,
PRIMARY KEY (order_ID),
FOREIGN KEY (customer_ID) REFERENCES Customers_Registration(customer_ID)
);
```

```
CREATE TABLE Billing
(
sell_ID INT NOT NULL,
Total_amount INT NOT NULL,
Customer_ID INT NOT NULL,
PRIMARY KEY (sell_ID),
FOREIGN KEY (Customer_ID) REFERENCES Customer(Customer_ID)
);
```

```
CREATE TABLE Doctor1(
Doctor_ID INT NOT NULL,
```

```
Specialization varchar2(20) NOT NULL,  
Qualification varchar2(20) NOT NULL,  
Customer_ID INT NOT NULL,  
PRIMARY KEY(Doctor_ID),  
FOREIGN KEY(Customer_ID) REFERENCES Customers_Registration(Customer_ID)  
);
```

```
CREATE TABLE Doctor2(  
Email varchar2(20) NOT NULL,  
Contact INT NOT NULL,  
PRIMARY KEY (Email)  
);
```

```
CREATE TABLE Drone Dealers1(  
Dealer_ID INT NOT NULL,  
Dealer Name varchar(20) NOT NULL,  
Contact INT NOT NULL,  
PRIMARY KEY (Dealer_ID)  
);
```

```
CREATE TABLE Drone Dealers2(  
Customer_ID INT NOT NULL,  
Dealer_ID INT NOT NULL  
);
```

```
CREATE TABLE Purchase_Medicines_Details  
(  
Medicine_Name varchar2(20) NOT NULL,  
Quantity INT NOT NULL,  
Amount INT NOT NULL,  
customer_ID INT NOT NULL,  
order_ID INT NOT NULL,  
PRIMARY KEY (Medicine_Name),  
FOREIGN KEY (customer_ID) REFERENCES Customers_Registration(customer_ID),  
FOREIGN KEY (order_ID) REFERENCES Billing(order_ID),  
FOREIGN KEY (Medicine_Name) REFERENCES Inventory(Medicine_Name)  
);
```

```
CREATE TABLE Purchase Medicines Data1(  
Purchase_ID INT NOT NULL,  
Purchase Date DATE NOT NULL,  
PRIMARY KEY (Purchase_ID)  
);
```

```
CREATE TABLE Purchase Medicines Data2(  
Medicine Name varchar(20) NOT NULL,  
Sell Rate INT NOT NULL,  
Expire Date DATE NOT NULL,  
Batch Number INT NOT NULL,  
Primary Key(Medicine Name)  
);
```

```
CREATE TABLE Sell Table1(
Quantity INT NOT NULL,
Sell Rate INT NOT NULL,
Customer_ID INT NOT NULL,
Medicine Name varchar(20) NOT NULL,
FOREIGN KEY(Customer_ID) REFERENCES Customer(Customer_ID),
FOREIGN KEY (MEDICINE_NAME) REFERENCES INVENTORY(MEDICINE_NAME)
);
```

```
CREATE TABLE Sell Table2(
Customer_ID INT NOT NULL,
Sell_ID INT NOT NULL,
FOREIGN KEY(Customer_ID) REFERENCES Customer(Customer_ID),
FOREIGN KEY(Sell_ID) REFERENCES Billings(Sell_ID)
);
```

```
CREATE TABLE Purchase_from_Dealer
(
D_ID INT NOT NULL,
Purchase_ID INT NOT NULL,
PRIMARY KEY (D_ID, Purchase_ID),
FOREIGN KEY (D_ID) REFERENCES Medicine_Dealer(D_ID),
FOREIGN KEY (Purchase_ID) REFERENCES Purchase_medicines_Data(Purchase_ID)
);
```

Inserting Values In Tables:-

-----cusotmer registration table-----

```
InsertintoCustomers_Registrationvalues('christopher','comstock','Wrngl','TS',IND',9871593584,
'comstock@gmail.com',1);
insert into Customers_Registration values ('Harry','Styles',
'BZA,AP,IND',2541251253,'HarryStyles0102@gmail.com',2);
insert into Customers_Registration values ('Nail','Horan',
'Krnl,AP,IND',6985421580,'Nail0171@gmail.com',3);
insert into Customers_Registration values ('Shawn','Mendes',
'Indore,MP,IND',5897415895,'ShawnMendes@yahoo.com',4);
insert into Customers_Registration values ('Taylor','Swift',
'Delhi,Delhi,IND',9894598720,'taylor@swifies.com',5);
```

=====cusotmer table=====

```
insert into cusotmer values('Olivia',9876589120,'BZA,AP,IND',1001);
insert into cusotmer values('Rosee',9872389120,'Indore,MP,IND',1002);
insert into cusotmer values('Liam Payne',8976589120,'Ballarshah,Maharastra,IND',1003);
insert into cusotmer values('Marshmello',9812389120,'BZA,AP,IND',1004);
insert into cusotmer values('Ryan Ronalds',9636589120,'chennai,TN,IND',1005);
insert into cusotmer values('Selena',9876525890,'Ooty,kerala,IND',1006);
```


-----medicine dealer-----

```
insert into medicine_dealer values ('Rajat',9876543210,'Wrngl,TS,IND',2001);
insert into medicine_dealer values ('Vamsi',9123453210,'Delhi,Delhi,IND',2002);
insert into medicine_dealer values ('Vijay',9876599910,'chennai,TN,IND',2003);
insert into medicine_dealer values ('Harsh',9874783210,'Indore,MP,IND',2004);
```

=====inventory=====

```
insert into inventory values ('Dolo 550',20,23-05-2024,3001,75);
insert into inventory values ('baclofen',70,23-09-2026,3002,60);
insert into inventory values ('Halcion',20,23-05-2024,3003,20);
insert into inventory values ('caffeine citrate solution-oral',55,05-10-2022,3004,44);
insert into inventory values ('Jantoven',100,31-05-2031,3005,60);
insert into inventory values ('magaldrate-oral',40,08-07-2027,3006,150);
insert into inventory values ('maraviroc',60,03-07-2026,3007,85);
insert into inventory values ('Odomzo',174,23-01-2030,3008,75);
insert into inventory values ('ofloxacin',125,01-01-2027,3009,10);
```

-----billing table 1-----

```
insert into billing values (4001,50,2001);
insert into billing values (4002,170,2002);
insert into billing values (4003,88,2003);
insert into billing values (4004,144,2004);
```

=====billing table 2=====

```
insert into billing values (5001,50,2001);
insert into billing values (5002,170,2002);
insert into billing values (5003,88,2003);
insert into billing values (5004,144,2004);
```

-----doctor1 table -----

```
insert into doctor1 values (6001,'general therapy','MBBS',1);
insert into doctor1 values (6001,'Eye specalist','MBBS',2);
insert into doctor1 values (6001,'heart surgery','MBBS',3);
insert into doctor1 values (6001,'thort infection','MBBS',5);
```

=====doctor2 table=====

```
insert into doctor2 values (Vamsi0610@gmail.com, 974136850);
insert into doctor2 values (Vijay0411@gmail.com, 974136850);
insert into doctor2 values (Rajat0212@gmail.com, 974136850);
insert into doctor2 values (christopher19@gmail.com, 974136850);
```

-----drone dealers1 table-----

```
insert into drone_dealers1 values (8001,'Tarun',0852 245 222);
insert into drone_dealers1 values (8002,'Sam',0853 155 571);
insert into drone_dealers1 values (8003,'Vakeel',0853 888 985);
insert into drone_dealers1 values (8004,'Jaydev',0853 144 141);
insert into drone_dealers1 values (8005,'Naveen',0852 114 545);
```

=====drone dealers2=====

```
insert into drone_dealers2 values (1,8002);
insert into drone_dealers2 values (2,8003);
insert into drone_dealers2 values (3,8004);
insert into drone_dealers2 values (5,8005);
insert into drone_dealers2 values (6,8001);
```

-----purchase medicine details-----

```
Insert into purchase_medicine_details values('Dolo550',20,100,1,4001,3001);
Insert into purchase_medicine_details values(' baclofen ',10,200,1,4004,3002);
Insert into purchase_medicine_details values(' maraviroc ',24,140,1,4003,3005);
Insert into purchase_medicine_details values(' Odomzo ',30,230,1,4002,3003);
Insert into purchase_medicine_details values('ofloxacin',40,250,1,4000,3004);
```

-----purchase medicines data1-----

```
Insert into purchase_medicine_data1 values(101,27-04-2021);
Insert into purchase_medicine_data1 values(102,24-04-2021);
Insert into purchase_medicine_data1 values(107,21-03-2021);
Insert into purchase_medicine_data1 values(104,22-03-2021);
Insert into purchase_medicine_data1 values(103,27-04-2021);
```

-----purchase medicines data2-----

```
Insert into purchase_medicine_data2 values('baclofen' ,12,27-04-2021,132414);
Insert into purchase_medicine_data2 values(' maraviroc ',15,24-04-2021,549253);
Insert into purchase_medicine_data2 values(' Odomzo ',20,21-03-2021,232412);
Insert into purchase_medicine_data2 values('ofloxacin',13,22-03-2021,432134);
Insert into purchase_medicine_data2 values('Dolo550',4,27-04-2021,452311);
```

-----Sell Table_1-----

Insert into Sell Table_1 values(30,12,4010,'baclofen');
Insert into Sell Table_1 values(12,14,4002,'Dolo 550');
Insert into Sell Table_1 values(14,17,4003,' Odomzo');
Insert into Sell Table_1 values(45,13,4001,' ofloxacin');

-----Sell Table_2-----

Insert into Sell Table_2 values(4002,5001);
Insert into Sell Table_2 values(4004,5005);
Insert into Sell Table_2 values(4003,5008);
Insert into Sell Table_2 values(4001,5007);

-----Purchase_from_Dealer-----

Insert into Sell Table_1 values(2001,1);
Insert into Sell Table_1 values(2003,2);
Insert into Sell Table_1 values(2004,3);
Insert into Sell Table_1 values(2005,4);