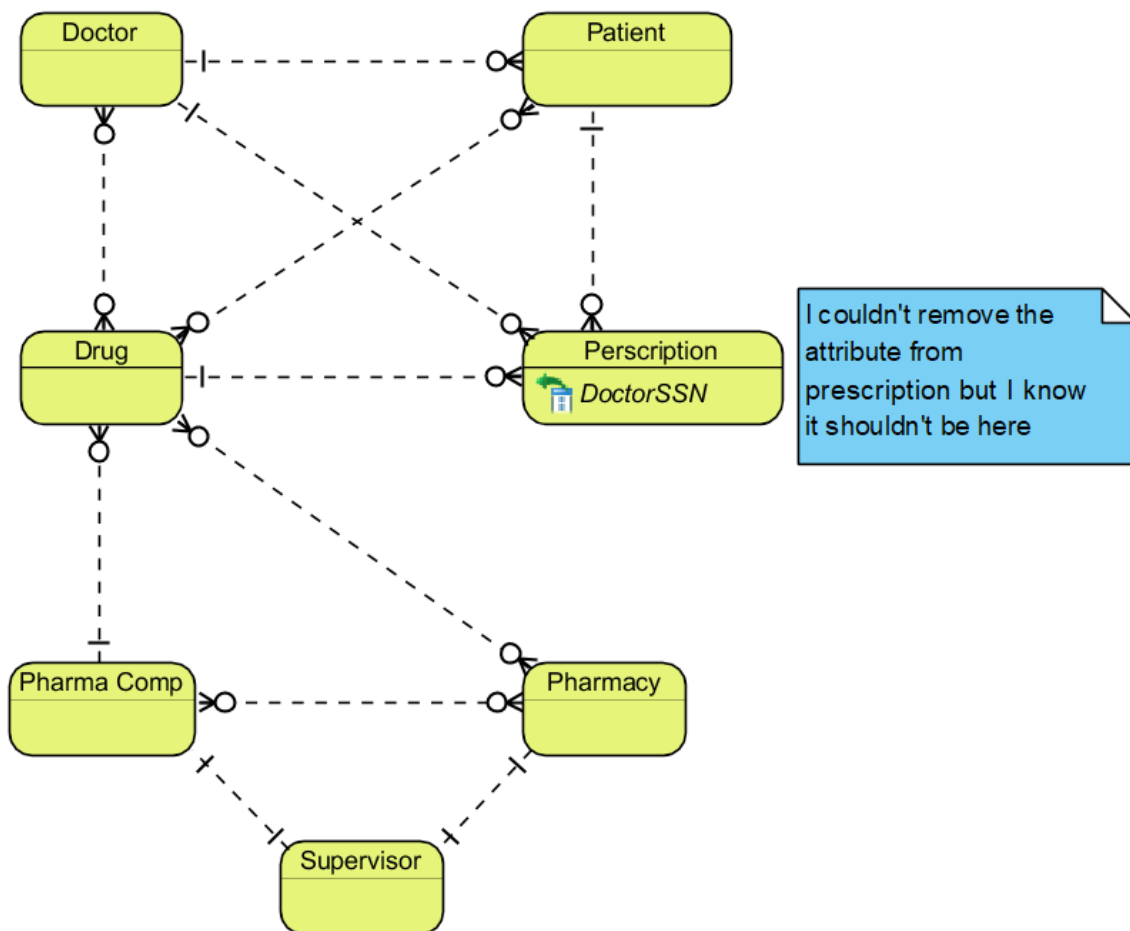
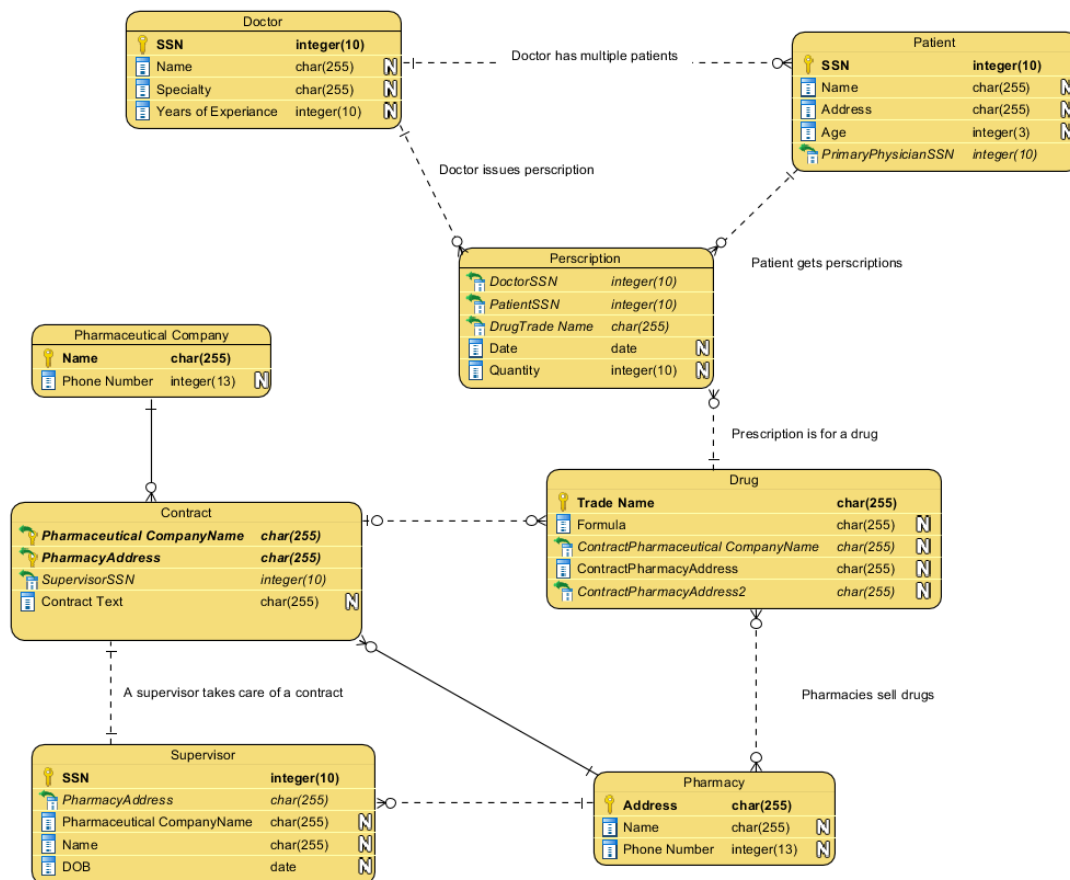


Conceptual



ERD



Relational Database Schema

Customer(customerID, lastName, firstName, address, city, state, zip, phone)

SalesPerson(salesPersonID, salespersonFirstName, salespersonLastName, salespersonCode)

Sales_Order(salesordernumber, date, subtotal, tax, total, customerID, salespersonID)

Sales_Order(customerID) is a foreign key in reference to Customer(customerID), and Sales_Order(salespersonID) is a foreign key reference to SalesPerson(salespersonID).

Item(itemnumber, unitprice, description)

Order_Line_Item(lineNumber, salesordernumber, quantity, unitprice, extenedPrice, itemnumber)

Order_Line_Item(salesordernumber) is a foreign key reference to Sales_Order(salesordernumber), and Order_Line_Item(itemnumber) is a reference to Item(itemnumber)

SQL

1. update room set price = price * 1.05;

90 14:10:32 update room set price = price * 1.05

9 row(s) affected Rows matched: 9 Changed: 9 Warnings: 0

2. select * from room where type = "family" or type = "double" and price < 40 ORDER BY price ASC;

	roomNo	hotelNo	type	price
	R101	H001	Double	26.25
	R110	H003	Double	36.75
	R302	H001	Familv	42.00
	R302	H002	Familv	157.50
	R210	H003	Familv	210.00
	R907	H004	Familv	210.00
	NULL	NULL	NULL	NULL

3. SELECT sum(price)/count(price) FROM room;

	sum(price)/count(price)
	96.483333

4. select * from room where roomNo not in (select roomNo from booking);

	roomNo	hotelNo	type	price
	R110	H003	Double	36.75
	NULL	NULL	NULL	NULL

5. select hotelNo, count(roomNo) from room where hotelNo in (select hotelNo from hotel where city = 'Washington');

	hotelNo	count(roomNo)
	H001	3

6. select * from booking where dateTo is null or dateTo = '0000-00-00';

	bookingNo	dateFrom	dateTo	guestNo	roomNo	hotelNo
	B001	2012-02-08	0000-00-00	G001	R001	H001
	B003	2013-07-15	0000-00-00	G001	R210	H003
	B005	0000-00-00	0000-00-00		R101	H002
	B006	0000-00-00	0000-00-00		R302	H002
	NULL	NULL	NULL	NULL	NULL	NULL

7. select * from hotel where city = 'London';

	hotelNo	hotelName	city
	NULL	NULL	NULL

8. select count(hotelNo) from hotel;

	count(hotelNo)
	4

9. select sum(price) from room where type = 'Double';

	sum(price)
	157.50

10. truncate table booking; // it says 0 rows affected but works nevertheless

107 14:18:26 truncate table booking

0 row(s) affected

Transaction

	id	s	si
	1	first	NULL
	2	second	NULL
	3	third	NULL
	5	fifth	NULL
	NULL	NULL	NULL

The “ROLLBACK” command took effect on the fourth element because it was preceded by “START TRANSACTION”. MySQL then went back into auto-commit mode, which is why the last rollback did not work.