

## Schema-Assignment(Car Rental Company)

### 2. Answer2

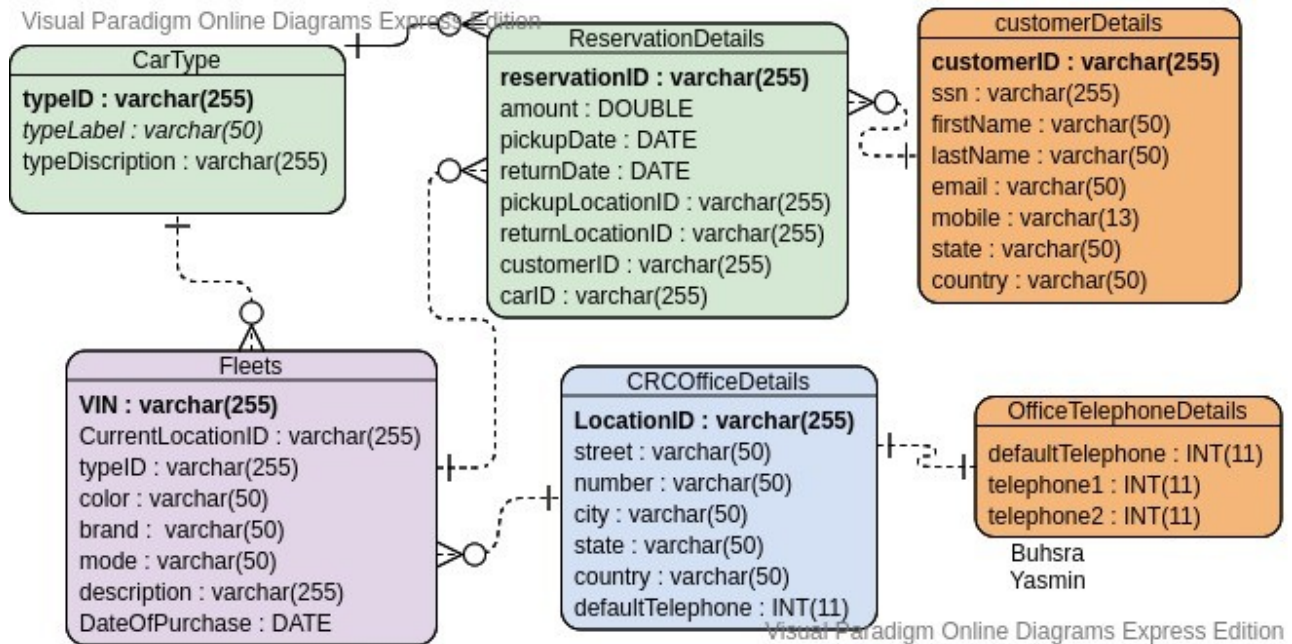


fig:- schema for car rental company

### 3. Answer3

a.

```
mysql>select reservationID, pickupLocationID from reservationDetails where pickupDate = '2015-05-01';
```

b.

```
mysql>select distinct c.firstName, c.lastName, c.mobile from customersDetails as c, reservationDetails as r, car_type as t, car where c.customerID=r.customerID and r.carID=car.carID and car.typeID=t.typeID and t.typeLabel='Luxury';
```

c.

```
mysql>select pickupLocationID, count(carID) from reservationDetails group by pickupLocationID;
```

d.

```
mysql>select car.typeID, extract(year from r.pickupDate) "Year", extract(month from r.pickupDate) "Month", count(r.carID) from reservationDetails as r, car where r.carID=car.carID group by car.typeID, year, month order by car.typeID ASC, year ASC, month ASC;
```

e.

```
mysql>select o.state, t.typeLabel, count(reservationID) from reservationDetails as rev, CRCOfficeDetails as ofc, car as c, car_type as t where rev.pickupLocationID=ofc.locationID and rev.carID=c.carID and c.typeID=t.typeID group by ofc.state, c.typeID order by ofc.state, rentals DESC;
```

f.

```
mysql>select o.state, count(r.reservationID) as rentals from reservationDetails as rev,
CRCOfficeDetails as ofc where rev.pickupLocationID=ofc.locationID and (ofc.state="NY" or
ofc.state="NJ" or ofc.state="CA") and extract(year from rev.pickupDate)=2015 and extract(month
from rev.pickupDate)=5 group by ofc.state;
```

g.

```
mysql>select year(pickupdate) month(pickupDate), count(reservationID) from reservationDeatils
where amount>all
(select avg(amount) from reservationDetails group by month(pickupDate)) and reservationID in
(select reservationID from reservationDeatils where year(pickupDate)=2015 ) group by
month(pickupDate);
```

h.

```
mysql>SELECT year(t.pickupdate) month(t.pickupdate), ROUND((t.amount- l.amount) * 100 /
t.amount, 2) as percent FROM reservationDetails as a INNER JOIN reservationDetails as b
ON
month(b.pickupdate) = month(a.pickupdate) AND year(a.pickupdate) = year(b.pickupdate) - 1
where year(b.pickupdate)=2015;
```

1. Answer1:

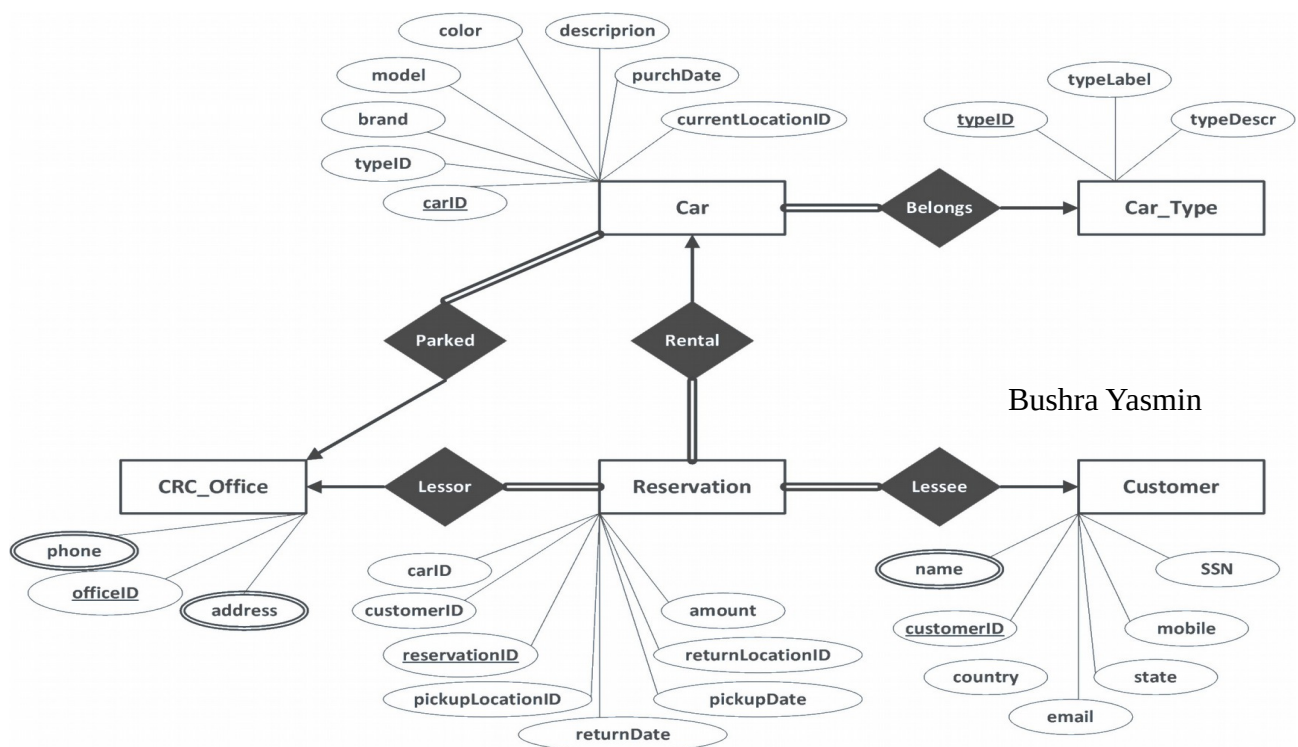


fig:- ER diagram for Car Rental Company