

role_name
salesperson
customer
manager
mechanics

role		
Primary Key	role_id	SERIAL
	role_name	VARCHAR(40)

personal_info		
Primary Key	person_info_id	SERIAL
	first_name	VARCHAR(50)
	last_name	VARCHAR(50)
	email	VARCHAR(50)
	phone	VARCHAR(10)
	address	VARCHAR(255)
Foreign Key	role_id	INTERGER

A rol must refer a person or multiple people.
A person may have one or multiple(saleperson and customer can be same at the same time)

invoice		
Primary Key	invoice_id	SERIAL
Foreign Key	customer_id	INTEGER
Foreign Key	salesperson_id	INTEGER
Foreign Key	car_serial_num	INTEGER
Foreign Key	invoice_type	INTEGER
Foreign Key	ticket_id	INTEGER
	invoice_date	DATE

An invoice must be a saleperson and only.
A saleperson can be in different invoices. If saleperson havent sold any car the can be 0.

invoice_type		
Primary Key	invoice_type_id	SERIAL
	type_name	VARCHAR(40)

role_name
sell
rent
repair

A car may not be in a receipt(not sold yet) and multiple times like sells - buys or multiple services. In an invoice, a car can be only one.

car		
Primary Key	car_serial_num	VARCHAR(20)
	make	VARCHAR(20)
	model	VARCHAR(20)
	color	VARCHAR(20)
	year	DATE
	new	BOOLEAN
	value	DECIMAL(10,2)

A mechanic may have not assinged for any service or he can work on multiple service. A mechanic service must assign one and only mechanic (there can be exception if assinged mechanics cannot handle it, the job could be done by others help)

service_mechanic		
Primary Key	service_mechanics_id	SERIAL
	ticket_id	INTEGER
	mechanics_id	INTEGER
	hours	DECIMAL(5,2)
	hourly_rate	DECIMAL(5,2)
	comment	VARCHAR(400)

mechanic service must charge one and multiple times(depends on hourly rate for each service). Since mechanic service price is spesific to service, it blongs to specific service ticket. if mechanic service turns to more generic then relation should be changed.

customer		
Primary Key	customer_id	SERIAL
Foreign Key	personal_info	INTEGER

salesperson		
Primary Key	salesperson_id	SERIAL
Foreign Key	personal_info	INTEGER
Foreign Key	manager_id	INTEGER

mechanics		
Primary Key	mechanics_id	SERIAL
Foreign Key	personal_info	INTEGER
Foreign Key	manager_id	INTEGER

manager		
Primary Key	manager_id	SERIAL
Foreign Key	personal_info	INTEGER

A customer may havent had a service or had multiple times. A service ticket must assign for one and only a customer.

This is same as car table.

Car and cutomer tables linked to service_ticket table separately bc car may have previous owner or customer may own different cars or had different car in the past.

Service cost will associate with cutomer from this connectoin for the invoice.

service_ticket		
Primary Key	ticket_id	SERIAL
Foreign Key	car_serial_num	INTEGER
Foreign Key	customer_id	INTEGER
	Date received	DATE
	Date returned	DATE
	issue	VARCHAR(400)

A part may not use in a service bc service does not require to use any. Service may require to use multiple parts.
Part used table must have ticket service one and multiple service ticket.

parts_used		
Primary Key	part_used_id	SERIAL
Foreign Key	ticket_id	INTEGER
Foreign Key	part_id	INETGER
	quantity	INTEGER
	description	VARCHAR(400)

A part must use one only. I have quantity in part used table so i dont need to call same part multiple times. A part can be in different part _used tickets so it can be one or many but since part has part number , it is specific to parts used. The relationship should be one and only

part		
Primary Key	part_id	SERIAL
	part_number	VARCHAR(50)
	description	VARCHAR(400)
	purchase_price	DECIMAL(5,2)
	retail_price	DECIMAL(5,2)