

role_name
saleperson
customer
manager
mechanic

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 customer has to have one invoice and many.
A invoice must have a customer and only

sale_invoice		
Primary Key	invoice_id	SERIAL
Foreign Key	cutomer_id	INTEGER
Foreign Key	saleperson_id	INTEGER
Foreign Key	car_id	INTEGER
Foreign Key	invoice_type	INTEGER
	sale_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)
Foreign Key	service_id	INTEGER
	make	INTEGER
	model	INTEGER
	color	INTEGER
	year	DATE
	new	BOOLEAN
	value	INTEGER

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_mechanic_id	SERIAL
	service_ticket	INTEGER
	mechanic_id	INTEGER
	hours	INTEGER
	hourly_rate	INTEGER
	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

saleperson		
Primary Key	saleperson_id	SERIAL
Foreign Key	personal_info	INTEGER
Foreign Key	manager_id	INTEGER

mechanic		
Primary Key	mechanic_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. Part used can be one time even though service require multiple part. Used part table keeps all part that used during maintainance so no point to have it multiple times in service ticket table.

Part used table must have ticket service one and multiple service ticket.

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

A part must use one time since there quantity field no need to have it multiple times. A part can be in different part _used tickets so it can be one or many

parts		
Primary Key	part_id	SERIAL
	part_number	VARCHAR(50)
	description	VARCHAR(400)
	purchase_price	INTEGER
	retail_price	INTEGER