

**Customer** (id, national\_id, first\_name, last\_name, phone\_number, birthday, city, customer\_address, postal\_code, agency\_id)

**Agency** (id, agency\_name, city, agency\_address, telephone)

**Vehicle** (id, vehicle\_name, class\_code, color, options)

**SalePlan** (id, start\_time, end\_time, sale\_type, description)

// sale\_type is enum of 'presale' and 'normal'

**VehicleForSale** (id, sale\_id, vehicle\_id, available, deliver\_date)

**Checks** (id, vehicle\_for\_sale\_id, due\_time, price)

**Contract** (id, customer\_id, vehicle\_for\_sale\_id, assign\_time, insurance)

**Transaction** (id, customer\_id, check\_id, assign\_time)

## Customer

Attribute	Type	PK	FK	Unique	Nullable	Default	Constraints
id	integer	Y		Y			1 - $\infty$
national_id	integer			Y			length = 10
first_name	string						2<length<15
last_name	string						2<length<15
phone_number	integer			Y			IR Phone regex
birthday	string						< '2002-01-01'
city	string						
customer_address	string						10<length<100
postal_code	integer			Y			length = 10
agency_id	integer		Agency(id)				1 - $\infty$

## Agency

Attribute	Type	PK	FK	Unique	Nullable	Default	Constraints
id	integer	Y		Y			1 - $\infty$
agency_name	string						2<length<20
city	string						
agency_address	string						10<length<100
telephone	integer			Y			IR Phone regex

## Vehicle

Attribute	Type	PK	FK	Unique	Nullable	Default	Constraints
id	integer	Y		Y			1 - $\infty$
vehicle_name	string						
class_code	integer						
color	string						Hex color code
options	string				Y		

## SalePlan

Attribute	Type	PK	FK	Unique	Nullable	Default	Constraints
id	integer	Y		Y			1 - $\infty$
start_time	string						Time Stamp
end_time	string						Time Stamp
type	string						2 Type of sales
description	string				Y	'Sale'	length < 100

## VehicleForSale

Attribute	Type	PK	FK	Unique	Nullable	Default	Constraints
id	integer	Y		Y			1 - $\infty$
sale_id	integer		SalePlan(id)	Y			1 - $\infty$
vehicle_id	integer		Vehicle(id)				1 - $\infty$
available	integer				Y	0	not negative
deliver_date	String						Date Type

## Checks

Attribute	Type	PK	FK	Unique	Nullable	Default	Constraints
id	integer	Y		Y			1 - $\infty$
vehicle_for_sale_id	integer		VehicleForSale(id)				1 - $\infty$
due_time	string						Time Stamp
price	integer						

## Contract

Attribute	Type	PK	FK	Unique	Nullable	Default	Constraints
id	integer	Y		Y			1 - $\infty$
customer_id	integer		Customer(id)	Y			1 - $\infty$
vehicle_for_sale_id	integer		VehicleForSale(id)				1 - $\infty$
assign_time	string				Y	Now	Time Stamp
insurance	string				Y	null	

## Transaction

Attribute	Type	PK	FK	Unique	Nullable	Default	Constraints
id	integer	Y		Y			1 - $\infty$
customer_id	string		Customer(id)	Y			1 - $\infty$
check_id	string		Checks(id)				1 - $\infty$
assign_time	string				Y	Now	Time Stamp