

Vehicles

VIN: alphanumeric, 17 digits without I, O, Q

Type: can only choose values in the list of types

Model year: century numeric, range in [1886, 2022]

Manufacturer: can only choose values in the list of manufacturers

Sold: Boolean, sold or unsold

List price: $1.25 * \text{sold price}$

Date added: date time format

Color: can only choose values in the list of colors

Model name

Description

Invoice price

Num of doors: positive integer

Has Driver's Side Back Door: Boolean, yes or no

Drivetrain type: can only choose values in the list (AWD, FWD, RWD, etc.)

Number of cupholders: positive integer

Back seat count: positive integer

Cargo capacity: in tons, must greater than 0

Number of rear axles: positive integer

Roof type

Cargo cover type

Customers

Phone number: numeric 10 digits

Email: follow the email format

Tax identification number: numeric 9 digits

First Name

Last Name

Name (Person)

Name (Business)

Contact Name

Contact Title

Address

Sales Events:

Sold date: date time format, no later than the day of "Date added" in the Vehicle entity

Sold price: $> 0.95 * \text{invoice price}$, except for the adding of owner

Repair Events:

Start date

End date: date time format, not earlier than the start day

Odometer: positive integer

Labor charges: two decimals; The update cannot be less than the previous value, except for the update of owner

Total cost: labor cost + \sum (quantity used of each part used * unit price of each part used)

Description

Needs:

Quantity used: positive integer

Parts:

Price: dollar format, two decimals

Number: alphanumeric

Users

First Name

Last Name

Name: The name of owner must be "Jaunty Jalopies"

Roles: there is only one owner. And, at the same time, the owner has all other values of roles. Except for the owner instance, other instances in the logged-in users can only have one role.

Password