Car Dealership Application Database Proposal

GitHub: https://github.com/donglin1111/CS546.git

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User(*Customer/Dealer*):

The user collection will store the customer or dealer information. They will be able to login. The dealer can update their details, and post a car, delete a car.

```
{
        "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
        "firstName": "John”
        "lastName": "Doe",
        "Date of Birth": "Aug/08/1990”
        "SSN": "000-00-0000"
        "Email": "JDoe@gmail.com",
       “PhoneNum”:”551xxxxxxx”
        "Gender": "Male",
        "address": "500 xxx st,Hoboken",
        "State": "NJ",
        “Zipcode”: “07310”
        “IsDealer ”: false
        "Age": "30",
        "hashedPassword":
       "$2a$08$XdvNkfdNIL8F8xsuIUeSbNOFgK0M0iV5HOskfVn7.PWncShU.O",
        "purchaseHistory":
       ["7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310","7b696a2-d0f2-4g8g-h67d-7a1d4b6b6710"]
        ,
}
```

Name	Type	Description

_id	string	A globally unique identifier to represent the user.
purchaseHistory	array	The record about customer consumption
IsDealer	Boolean	To verify the user identity
hashPassword	string	The password when users log in.

Cars:

The cars collection will store all car information. It stores comments that are related to the car.

```
{
    "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
    "VIN": "7J3ZZ56Y78230003"
    "brand": "audi",
    "Model":"Q8"
    "VehicleType":"SUV",
    "time-to-market": "mm/dd/2020",
    "color":["black","blue","white","grey"],
    "Grade":[
    {
        "name":"Premium",
        "detail":[{
            "engine":"XXXXX",
            "wheels&tires":"XXXXXX",
            "function":["sunroof","Navigation","xxx","xxxx"]
        }],
        "price":  xxx
    },
    {xxxx}],
    "Interior":[{
        "name":"Standard",
        "color":["xxx","xxx","xxx"],
        "DecorativeInlays":["xxx","xxx"],
        "price":"xxx"
```

```
        },
        {XXX}],
        "Options":[{
                "Name":"xxx",
                "Include":[{
                        "Name":"xxxx",
                        "introduce":"Xxxxx xxxx xx x xxxx"},
                        {xx},
                        {xxx}],
                "Price":"xxxx"
        }],
        "comments":[{
            "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
            "name": "Jack Doe",
            "comment": "A nice car! I love it!"
        }]
}
```

Name	Type	Description
_id	String	A globally unique id for the car
brand	String	The name for the car manufacture
VehicleType	String	The type for the car
time-to-market	Date	The first time this car come into this market
color	String array	All color options for the car
Grade	Subdocument	List all grade for the car
Interior	Subdocument	List all interior type for the car
Options	Subdocument	List all possible seller for the car
comments	Subdocument	The comments text

Comments:

It stores comments that are related to the car.

```
{
        "_id": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
        "name": "Jack Doe",
        "comment": "A nice car! I love it!"
}
```

Name	Type	Description
_id	String	A globally unique id for the comment
name	String	The user name that create this comment
comment	String	The comment string

Grades:

The grades collection store the original price and current price

```
{
        "_id":"da56d1a5-1ds5-d1a5-61ds-35d11d4b5b63",
        "name":"Premium",
        "detail":[{
        "engine":"XXXXX",
        "wheels&tires":"XXXXXX",
        "function":["sunroof","Navigation","xxx","xxxx"]
        }],
        "price":  xxx
        "Subordinate":[{
                "_id":"7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
                "Name":"audi Q8 2020"
}
```

Name	Type	Description
name	String	The name for one grade
detail	Subdocument	The name for the car manufacture
function	String array	All functions this grade have

price	Data	One kind grade price