

Pre-owned Cars Sales Management System

Project Description:

Pre-owned Car Portal is a web application where the pre-owned car owners can sell their cars and the car buyers can able to view and buy car in budget. This application can be access by buyer, seller and admin. Admin can login and manage the car details, buyer details, seller details and sales detail. The admin can manage the car categories. Each car posted in this portal includes commission. Admin can add and manage the commission. The sellers can sign up themselves and can. They can post their car details like brand, color, model, fuel type, engine, registration date, mileage, no of owners and description of the car that they want to sell.

They can view the applications from the buyers and can able to respond them back. The admin will review the details, add the commission and approve or reject it. The payment will be made through the application and the seller will transfer the commission to the admin. The sellers can able to view the cars sales history. The buyers can sign up and login with the application. Both buyers and sellers can update their profile details. Buyers can view all the available cars details based on the car categories and budget. If interested the buyer can send a message to the seller. The seller will respond to it back.

Also, the buyer can view the sellers contact details and they can contact them. They can review the car and can buy it by paying the quoted amount in the application.

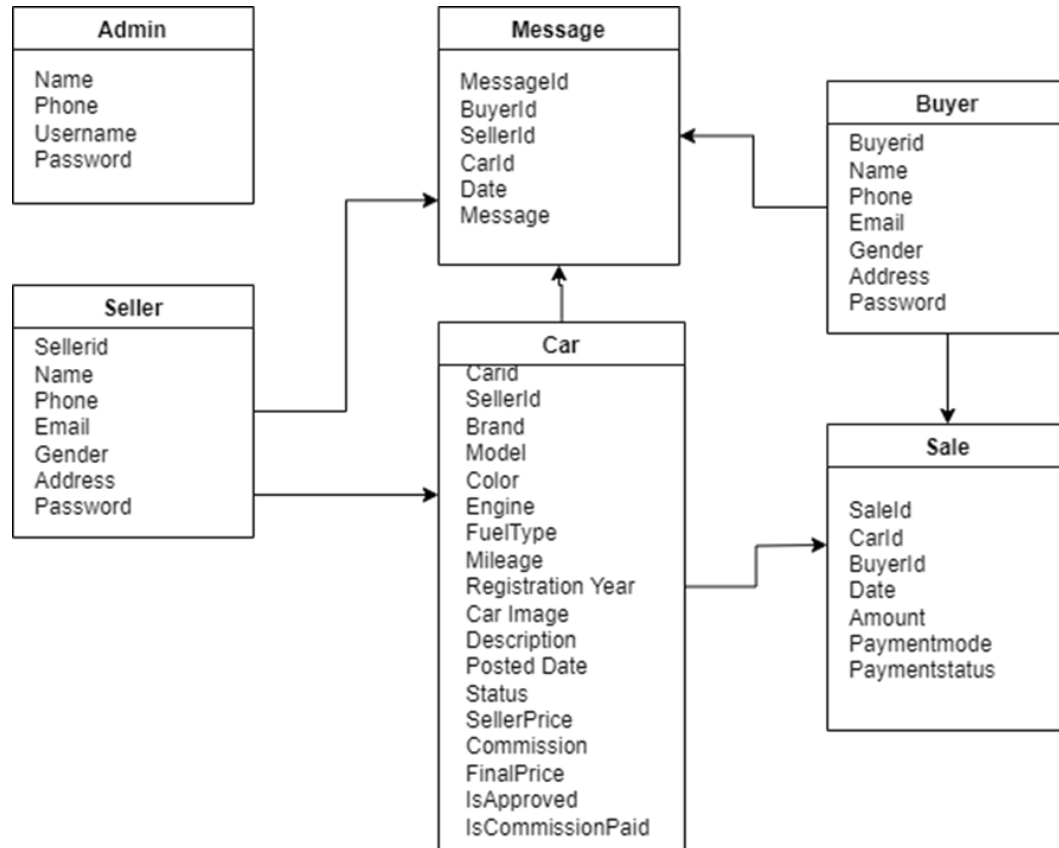
Database Description and Business Rules

Pre-owned Car Portal is a web application where the pre-owned car owners can sell their cars and the car buyers can be able to view and buy car in budget. This application can be access by buyer, seller and admin. Admin can login and manage the car details, buyer details, seller details and sales detail. The admin can manage the car categories. Each car posted in this portal includes commission. Admin can add and manage the commission.

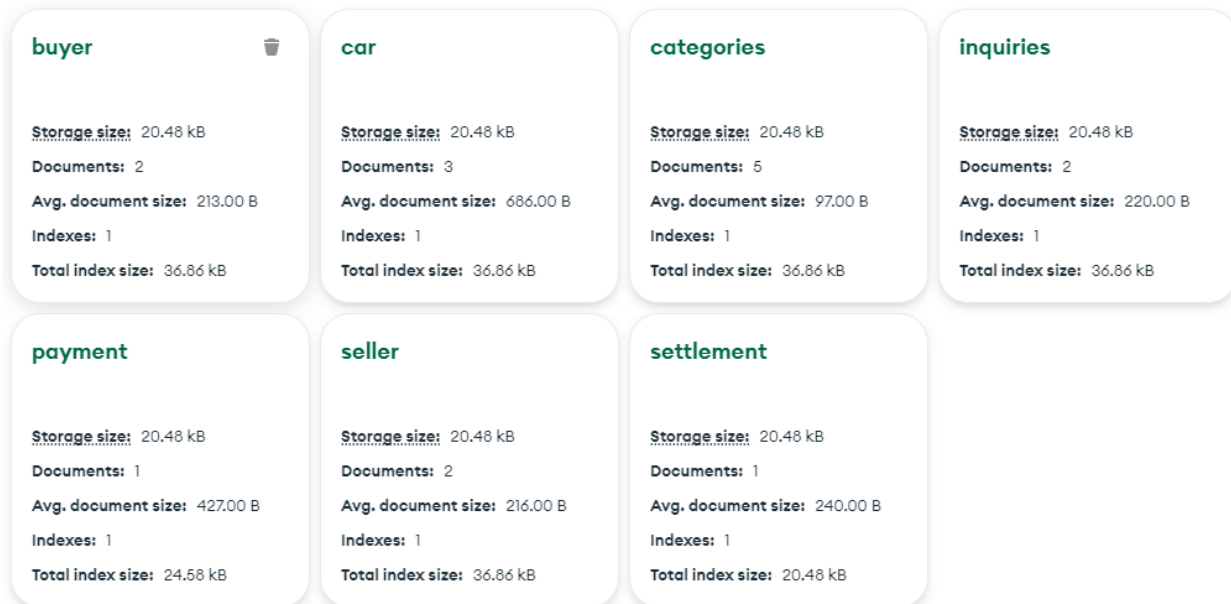
The sellers can sign up themselves and can. They can post their car details like brand, color, model, fuel type, engine, registration date, mileage, no of owners and description of the car that they want to sell. They can view the applications from the buyers and can be able to respond back to them. The admin will review the details, add the commission, and approve or reject it. The payment will be made through the application and the seller will transfer the commission to the admin. The sellers can be able to view the cars sales history.

The buyers can sign up and login with the application. Both buyers and sellers can update their profile details. Buyers can view all the available cars details based on the car categories and budget. If interested the buyer can send a message to the seller. The seller will respond to it back. Also, the buyer can view the sellers' contact details and they can contact them. They can review the car and can buy it by paying the quoted amount in the application.

NoSQL Database Model



NoSQL Database Model of this preowned car system contains the following collections:



1. Categories Collection:

```
_id: ObjectId('64c403b99d683b7132e7fdc3')  
catId: "CAT2370001"  
name: "HatchBack"  
_class: "com.car.model.Category"
```

```
_id: ObjectId('64c403c09d683b7132e7fdc4')  
catId: "CAT2370002"  
name: "Sedan"  
_class: "com.car.model.Category"
```

2. Seller Collection

```
_id: ObjectId('64c3ec4a4535da459c7e8193')
sellerId: "SELER64901"
name: "Seller - 1"
address: "2570 Heavner Court, Lynbrook, New York(NY), 11563"
mobile: "516-651-1336"
emailId: "seller1@gmail.com"
password: "1234"
_class: "com.car.model.Seller"
```

3. Cars Collection

```
_id: ObjectId('64c41184e998820e4a5f719a')
categoryId: "64c403b99d683b7132e7fdc3"
carId: "CAR0362353"
sellerId: "SELER64901"
brand: "Volkswagen"
model: "Polo"
regYear: "APR 2015"
regNumber: "GJ23-AN9894"
engineCapacity: "1198 cc"
transmission: "Manual"
kmDriven: "75151"
fuelType: "Petrol"
noOfOwner: 3
basePrice: 38100
description: "4 tyres that still have 100% of their tread life remaining, Rated 4 on..."
imgUrl: "64c41184e998820e4a5f719a.webp"
commissionPercentage: 10
postedDate: "2023-07-29T00:35:40.337993600"
isApproved: true
isSold: true
isBooked: true
```

4. Buyer Collection

```
_id: ObjectId('64c3ebf54535da459c7e8192')
buyerId: "BUYER64901"
name: "Buyer - 1"
address: "2662 Little Acres Lane, Kansas, Illinois(IL), 61933"
mobile: "708-266-2553"
emailId: "buyer1@gmail.com"
password: "1234"
_class: "com.car.model.Buyer"
```

```
_id: ObjectId('64c5171de31dfb774a6e3fc1')
buyerId: "BUYER64902"
name: "buyer-2"
address: "address"
mobile: "75698745632"
emailId: "buyer2@gmail.com"
password: "1234"
_class: "com.car.model.Buyer"
```

5. Payment Collection

```
_id: ObjectId('64c507c9f0eed4106c716553')
paymentId: "B00K362353"
carId: "CAR0362353"
sellerId: "SELER64901"
buyerId: "BUYER64901"
bookingDate: "2023-07-29T18:06:25.569559400"
amount: 38100
bookingAmount: 19050
balanceAmount: 19050
paymentMode: "Credit Card"
paymentStatus: "Paid"
status: "Sold"
settlementStatus: "Settled"
cardNo: "8520741085209632"
cvv: "33"
expDate: "2025-01-22"
_class: "com.car.model.Payment"
```

6. Settlement Collection

```
_id: ObjectId('64c530638d531c55ccca2fc8')  
paymentId: "B00K362353"  
sellerId: "SELER64901"  
payDate: "29/07/2023"  
saleAmount: 38100  
commissionPercentage: 10  
commissionAmount: 3810  
settlementStatus: "Settled"  
_class: "com.car.model.Settlement"
```

Sample Data:

Buyer

```
{
  "_id": {
    "$oid": "64c3ebf54535da459c7e8192"
  },
  "buyerId": "BUYER64901",
  "name": "Buyer - 1",
  "address": "2662 Little Acres Lane, Kansas, Illinois(IL), 61933",
  "mobile": "708-266-2553",
  "emailId": "buyer1@gmail.com",
  "password": "1234",
  "_class": "com.car.model.Buyer"
}
```

Car

```
{
  "_id": {
    "$oid": "64c515cbe31dfb774a6e3fbf"
  },
  "categoryId": "64c403c09d683b7132e7fdc4",
  "carId": "CAR0362354",
  "sellerId": "SELER64902",
  "brand": "Honda",
  "model": "Honda City I-VTEC V",
  "regYear": "AUG 2014",
  "regNumber": "GJ01-RF7831",
  "engineCapacity": "1497 CC",
}
```



```
"transmission": "Manual",
"kmDriven": "44,500 km",
"fuelType": "Petrol",
"noOfOwner": 1,
"basePrice": 7600,
"description": "Drive in style with sleek alloy wheels, 4 tyres that still have
100% of their tread life remaining, Equipped with 2 airbags and an Antilock
Braking System (ABS)",
"imgUrl": "64c515cbe31dfb774a6e3fbf.webp",
"commissionPercentage": 10,
"postedDate": "2023-07-29T19:06:11.560593200",
"isApproved": true,
"isSold": false,
"isBooked": false,
"_class": "com.car.model.Car"
}
```

Seller

```
{
  "_id": {
    "$oid": "64c3ec4a4535da459c7e8193"
  },
  "sellerId": "SELER64901",
  "name": "Seller - 1",
  "address": "2570 Heavner Court, Lynbrook, New York(NY), 11563",
  "mobile": "516-651-1336",
  "emailId": "seller1@gmail.com",
  "password": "1234",
  "_class": "com.car.model.Seller"
}
```

Inquiries

```
{
  "_id": {
    "$oid": "64c52504b0d06b622e2fe4d4"
  },
  "carId": "CAR0362354",
  "buyerId": "BUYER64902",
  "sellerId": "SELER64902",
  "inquiry": "Inquiry from buyer2",
  "response": "Response from seller 2",
  "inquiryDate": "2023-07-29",
  "responseDate": "2023-07-29",
  "_class": "com.car.model.Inquiry"
}
```

Payment

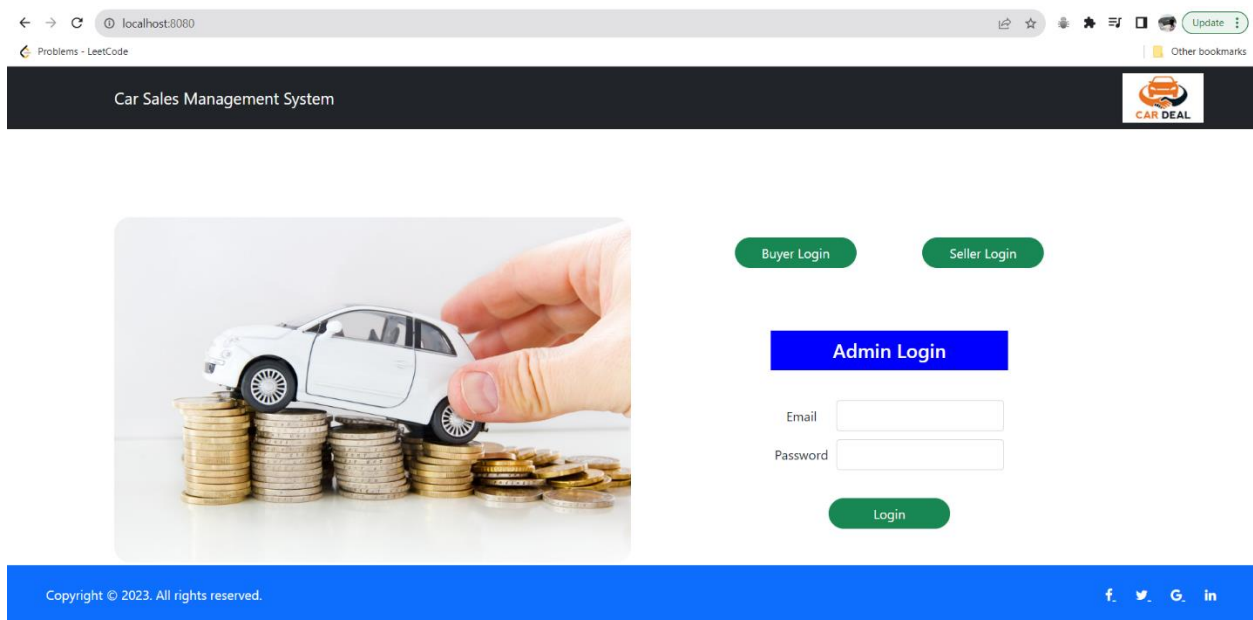
```
{
  "_id": {
    "$oid": "64c507c9f0eed4106c716553"
  },
  "paymentId": "BOOK362353",
  "carId": "CAR0362353",
  "sellerId": "SELER64901",
  "buyerId": "BUYER64901",
  "bookingDate": "2023-07-29T18:06:25.569559400",
  "amount": 38100,
  "bookingAmount": 19050,
  "balanceAmount": 19050,
}
```

```
"paymentMode": "Credit Card",  
"paymentStatus": "Paid",  
"status": "Sold",  
"settlementStatus": "Settled",  
"cardNo": "8520741085209632",  
"cvv": "33",  
"expDate": "2025-01-22",  
"_class": "com.car.model.Payment"  
}
```

DATABASE COLLECTIONS	DESCRIPTION
Categories	Contains information about the car categories.
Seller	Contains information about Seller details.
Car	Contains about car details.
Buyer	Contains information about buyer details.
Settlement	Contains information about settlement details
payment	Contains information about payment details.
Inquiries	Contains inquiries made by Buyers

Screenshots

Homepage



Login

The screenshot shows a web browser window with the address bar displaying 'localhost:8080/account/login/buyerLogin'. The page title is 'Problems - LeetCode'. The main header is 'Car Sales Management System'. The page has a light blue background. A red horizontal bar at the top of the content area contains the text 'Buyer Login'. Below this bar, there are two input fields: 'Email' and 'Password'. Below the input fields, there are two buttons: 'Login' (green) and 'SignUp' (red).

localhost:8080/account/login/buyerLogin

Problems - LeetCode

Car Sales Management System

Buyer Login

Email

Password

Login SignUp

The screenshot shows a web browser window with the address bar displaying 'localhost:8080/account/login/sellerLogin'. The page title is 'Problems - LeetCode'. The main header is 'Car Sales Management System'. The page has a light blue background. A green horizontal bar at the top of the content area contains the text 'Seller Login'. Below this bar, there are two input fields: 'Email' and 'Password'. Below the input fields, there are two buttons: 'Login' (green) and 'SignUp' (red).

localhost:8080/account/login/sellerLogin

Problems - LeetCode

Car Sales Management System

Seller Login

Email

Password

Login SignUp

Signup

Car Sales Management System

Buyer Signup

Name

Address

Mobile

Email Id

Password

Confirm Password

[Save](#) [Login](#)

MAHINDRA BOLERO 16 | MARUTI SUZUKI S-PRESSO 17 | TATA NEXON 18 | TATA ALTIROZ 19 | RENAULT TRIBER 20 | MAHINDRA BOLERO 16 | MARUTI SUZUKI S-PRESSO 17

← → ↻ localhost:8080/seller/create Problems - LeetCode Other bookmarks Update

Car Sales Management System

New Seller Signup

Name

Address

Mobile

Email Id

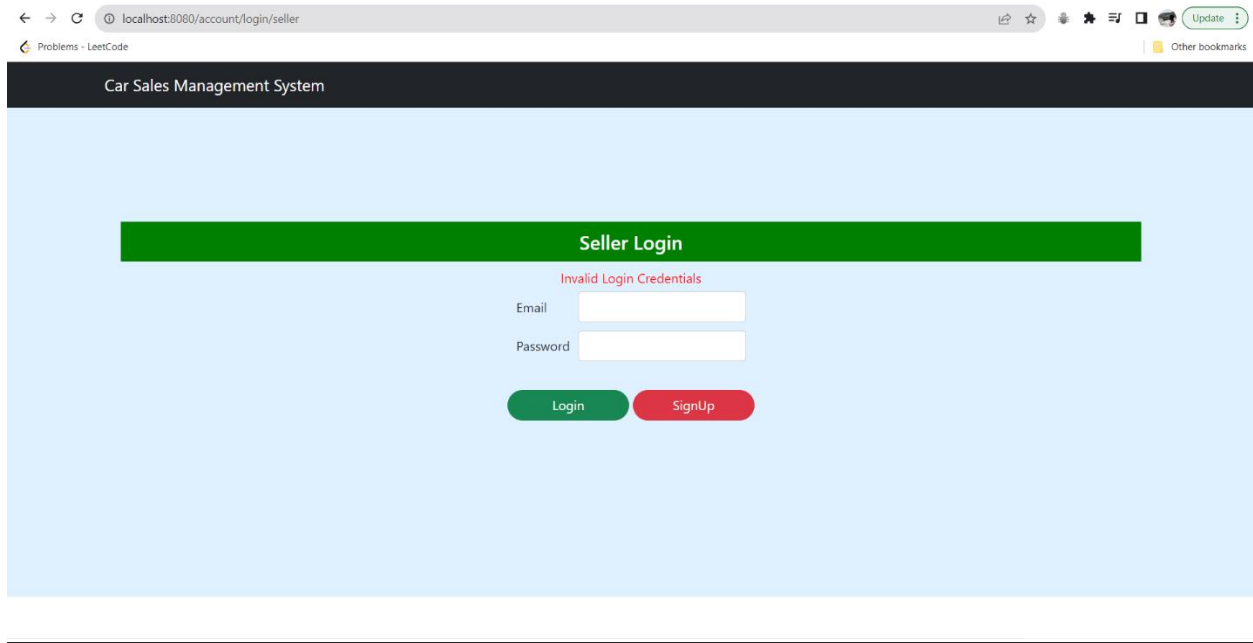
Password

Confirm Password

[Save](#) [Login](#)

MAHINDRA BOLERO 16 | MARUTI SUZUKI S-PRESSO 17 | TATA NEXON 18 | TATA ALTIROZ 19 | RENAULT TRIBER 20 | MAHINDRA BOLERO 16 | MARUTI SUZUKI S-PRESSO 17

Validation: Checks the authorization credentials of the users.



localhost:8080/account/login/seller

Problems - LeetCode

Other bookmarks

Car Sales Management System

Seller Login

Invalid Login Credentials

Email

Password

Login SignUp

Admin Page

Admin page consists of the following:

Categories: The Admin can add car categories such as SUV, sedan, sportscar etc.

← → ↻ localhost:8080/category/list

Problems - LeetCode

Other bookmarks

Car Sales Management

Home Categories Buyers Sellers PostedCars BookedCars Sold Cars Settlements Profile Logout

Category List

Category Save

Category Id	Category	Edit	Delete
CAT2370001	SUV	Edit	Delete
CAT2370002	Sedan	Edit	Delete
CAT2370003	convertible	Edit	Delete
CAT2370004	crossover	Edit	Delete
CAT2370005	hatchback	Edit	Delete

MARUTI BALI 14,869 UNITS

HYUNDAI VENUE 10,742 UNITS

MAHINDRA BOLERO 8,267 UNITS

MARUTI SUZUKI S-PRESSO 7,765 UNITS

TATA NEXON 6,903 UNITS

TATA ALIROZ 5,743 UNITS

RENAULT TRIBER 5,684 UNITS

MARUTI SUZUKI S-PRESSO 7,765 UNITS

Posted Car List: List all the cars' details such as ID, brand, model, seller price, status, commission.

Car Sales Management

Home Categories Buyers Sellers PostedCars BookedCars Sold Cars Settlements Logout

Car List

ID	Brand	Model	Seller Price	Status	Commission (%)
CAR0362353	Honda	Civic	\$ 15000.0	Approved	5.0
CAR0362354	Honda	Civic	\$ 14000.0	Approved	6.0

Buyers: Lists all the buyers' details such as buyerId, Name, Phone Number, Email, address.

localhost:8080/buyer/list

Problems - LeetCode

Other bookmarks

Car Sales Management

Home Categories Buyers Sellers PostedCars BookedCars Sold Cars Settlements Profile Logout

Buyer Details

ID	Name	Phone	Email	Address
BUYER64901	buyer	515353153153	buyer@gmail.com	3465674

14,869 UNITS

MARUTI BALNO

10,742 UNITS

HYUNDAI VENUE

8,267 UNITS

MAHINDRA BOLERO

14,869 UNITS

KIA SELTOS

10,655 UNITS

HYUNDAI ELITE 120

7,765 UNITS

MARUTI SUZUKI S-PRESSO

10,190 UNITS

MARUTI SUZUKI ERTIGA

6,903 UNITS

TATA NEXON

9,302 UNITS

TATA ALIROZ

11,755 UNITS

MARUTI SUZUKI EECO

5,684 UNITS

RENAULT TRIBER

14,869 UNITS

MARUTI NEXA BALENO

10,742 UNITS

MAHINDRA BOLERO

10,655 UNITS

HYUNDAI VENUE

7,765 UNITS

MARUTI SUZUKI S-PRESSO

Sellers: Lists all the seller's details such as sellerId, Name, Phone Number, Email, address.

localhost:8080/buyer/list

Problems - LeetCode

Other bookmarks

Car Sales Management

Home Categories Buyers Sellers PostedCars BookedCars Sold Cars Settlements Profile Logout

Buyer Details

ID	Name	Phone	Email	Address
BUYER64901	buyer	515353153153	buyer@gmail.com	3465674

14,869 UNITS

MARUTI BALNO

10,742 UNITS

HYUNDAI VENUE

8,267 UNITS

MAHINDRA BOLERO

14,869 UNITS

KIA SELTOS

10,655 UNITS

HYUNDAI ELITE 120

7,765 UNITS

MARUTI SUZUKI S-PRESSO

10,190 UNITS

MARUTI SUZUKI ERTIGA

6,903 UNITS

TATA NEXON

9,302 UNITS

TATA ALIROZ

11,755 UNITS

MARUTI SUZUKI EECO

5,684 UNITS

RENAULT TRIBER

14,869 UNITS

MARUTI NEXA BALENO

10,742 UNITS

MAHINDRA BOLERO

10,655 UNITS

HYUNDAI VENUE

7,765 UNITS

MARUTI SUZUKI S-PRESSO

Booked cars: List all the cars' details such as carID, booking id, seller id, buyer id, booked date, total amount, booking amount, payment mode.

Sold cars: Lists all the sold cars details.

localhost:8080/booking/sold

Problems - LeetCode

Other bookmarks

Car Sales Management

HomeCategoriesBuyersSellersPostedCarsBookedCarsSold CarsSettlementsProfileLogout

14,869 UNITS

MARUTI BALNO

10,742 UNITS

HYUNDAI VENUE

8,267 UNITS

MAHINDRA BOLERO

10,655 UNITS

HYUNDAI ELITE 120

7,765 UNITS

MARUTI SUZUKI S-PRESSO

10,190 UNITS

MARUTI VITARA BREZZA

6,903 UNITS

TATA NEXON

9,302 UNITS

TATA TIAGO

5,743 UNITS

TATA ALIROZ

9,115 UNITS

MARUTI SUZUKI CELERIO

5,684 UNITS

RENAULT TRIBER

10,742 UNITS

HYUNDAI VENUE

8,267 UNITS

MAHINDRA BOLERO

10,655 UNITS

HYUNDAI ELITE 120

7,765 UNITS

MARUTI SUZUKI S-PRESSO

Sold Cars

Car Id	Payment Id	Seller Id	Buyer Id	Booked Date	Amount	PayMode	Status	Settle
CAR0362360	BOOK362360	SELER64901	BUYER64901	2023-August-02 11:26 am	9000.0	Credit Card	Paid	Settle
CAR0362361	BOOK362361	SELER64901	BUYER64901	2023-August-02 11:28 am	10000.0	Credit Card	Paid	Settle

14,869 UNITS

MARUTI BALNO

10,742 UNITS

HYUNDAI VENUE

8,267 UNITS

MAHINDRA BOLERO

10,655 UNITS

HYUNDAI ELITE 120

7,765 UNITS

MARUTI SUZUKI S-PRESSO

10,190 UNITS

MARUTI VITARA BREZZA

6,903 UNITS

TATA NEXON

9,302 UNITS

TATA TIAGO

5,743 UNITS

TATA ALIROZ

9,115 UNITS

MARUTI SUZUKI CELERIO

5,684 UNITS

RENAULT TRIBER

10,742 UNITS

HYUNDAI VENUE

8,267 UNITS

MAHINDRA BOLERO

10,655 UNITS

HYUNDAI ELITE 120

7,765 UNITS

MARUTI SUZUKI S-PRESSO

Settlements: Lists all the settlement details such as payment id, seller id, settlement id, settlement date, sale amount, commission percentage, commission percentage.

[←](#)
[→](#)
[localhost:8080/booking/settlements](#)

Update

[Problems](#)
[LeetCode](#)

Other bookmarks

Car Sales Management

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[Sellers](#)
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[BookedCars](#)
[Sold Cars](#)
[Settlements](#)
[Profile](#)
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Settlement Details

payment Id	Seller Id	Settlement Date	Sale Amount	Commission(%)	Commission Amt	Settlement Amt
14,869 UNITS	BOOK362353	SELER64901	01/08/2023	\$ 7000.0	10.0	\$ 7000.0
MARUTI BALNO	KIA SELTOS	HYUNDAI ELITE 120	MARUTI SUZUKI CELERIO	MARUTI SUZUKI CELERIO	MARUTI SUZUKI CELERIO	MARUTI SUZUKI CELERIO
10,742 UNITS	10,655 UNITS	10,190 UNITS	9,302 UNITS	9,115 UNITS	10,742 UNITS	10,655 UNITS
HYUNDAI VENUE	HYUNDAI ELITE 120	MARUTI VITARA BREZZA	TATA TIAGO	MARUTI SUZUKI CELERIO	HYUNDAI VENUE	HYUNDAI ELITE 120
8,267 UNITS	7,765 UNITS	6,903 UNITS	5,743 UNITS	5,684 UNITS	8,267 UNITS	7,765 UNITS
MAHINDRA BOLERO	MARUTI SUZUKI S-PRESSO	TATA NEXON	TATA ALIROZ	RENAULT TRIBER	MAHINDRA BOLERO	MARUTI SUZUKI S-PRESSO

The Buyer page consists of the following:

Car Sales Management

[Home](#) [Profile](#) [My Bookings](#) [Purchased Cars](#) [Inquiries](#) [Logout](#)

View All Cars

Body Type

Fuel Type

Budget

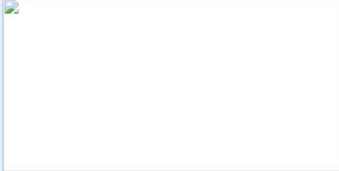
--Select--

--Select--

--Select--


Search

Reset



Honda

DetailsInquireSeller



Honda

DetailsInquireSeller

My Bookings: Lists all the bookings made by the buyer (Not paid total amount).

Car Sales Management

[Home](#) [Profile](#) [My Bookings](#) [Purchased Cars](#) [Inquiries](#) [Logout](#)

Booked Cars

Car Id	Booking Id	Seller Id	Booked Date	Total Amount	Booking Amount	PayMode	Action	Cancel
CAR0362354	BOOK362353	SELER64902	2023-07-31	14000.0	7000.0	Credit Card	Payment	Cancel

Purchased cars: List all the payment completed bookings.

localhost:8080/booking/purchased

Problems - LeetCode

Car Sales Management Home Profile My Bookings Purchased Cars Inquiries Logout

Purchased Cars

Car Id	Payment Id	Seller Id	Buyer Id	Booked Date	Amount	PayMode	Status
CAR0362360	BOOK362360	SELER64901	BUYER64901	2023-August-02 11:26 am	9000.0	Credit Card	Paid
CAR0362361	BOOK362361	SELER64901	BUYER64901	2023-August-02 11:28 am	10000.0	Credit Card	Paid

Inquiries: Can ask the seller for more details about the posted car.

localhost:8080/inquiry/list

Problems - LeetCode

Car Sales Management Home Profile My Bookings Purchased Cars Inquiries Logout

Inquiry List

Car Id	Buyer Id	Inquired On	Inquiry	Response	Responded On
CAR0362359	BUYER64901	2023-08-02	how is it?		
CAR0362353	BUYER64901	2023-08-01	ok	yes	2023-08-01

Profile: Can update his / her details.

My Profile

Buyer ID	BUYER64901
Name	buyer
Address	3465674
Mobile	515353153153
Email Id	buyer@gmail.com
Password


[Update](#)

The Seller page consists of the following:

Car Sales Management

Home Profile MyCars BookedCars Sold Cars Inquiries Settlements Logout

View My Cars



Honda Civic
Category : sedan, Engine : 1000cc
Reg Year : 2015, Fuel Type : Petrol
Price : 14000.0, Status : Available

[Details](#)

Mycars: Seller can add new sale post.

Car Sales Management

[Home](#)
[Profile](#)
[MyCars](#)
[BookedCars](#)
[Sold Cars](#)
[Inquiries](#)
[Settlements](#)
[Logout](#)

Add New Car

Photo

No file chosen

Category

--Select--

Brand

Model

Registered year

Registration Number

Engine capacity

Transmission

--Select--

KM Driven

Fuel Type

--Select--

No Of Owners

0

Price

0.0

Description

Save

14,369 UNITS

MAHINDRA BOLERO

16

14,369 UNITS

MARUTI SUZUKI S-PRESSO

17

13,610 UNITS

TATA NEXON

18

11,758 UNITS

TATA ALTIROZ

19

11,758 UNITS

RENAULT TRIBER

20

14,369 UNITS

MAHINDRA BOLERO

16

14,369 UNITS

MARUTI SUZUKI S-PRESSO

17

Sold cars: Lists all the sold cars.

[←](#)
[→](#)
[↻](#)

localhost:8080/booking/sold

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[Update](#)

Other bookmarks

Car Sales Management

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[BookedCars](#)
[Sold Cars](#)
[Settlements](#)
[Profile](#)
[Logout](#)

Sold Cars

Car Id	Payment Id	Seller Id	Buyer Id	Booked Date	Amount	PayMode	Status	Settle
CAR0362360	BOOK362360	SELER64901	BUYER64901	2023-August-02 11:26 am	9000.0	Credit Card	Paid	Settle
CAR0362361	BOOK362361	SELER64901	BUYER64901	2023-August-02 11:28 am	10000.0	Credit Card	Paid	Settle

14,369 UNITS

MAHINDRA BOLERO

16

14,369 UNITS

MARUTI SUZUKI S-PRESSO

17

13,610 UNITS

TATA NEXON

18

11,758 UNITS

TATA ALTIROZ

19

11,758 UNITS

RENAULT TRIBER

20

14,369 UNITS

MAHINDRA BOLERO

16

14,369 UNITS

MARUTI SUZUKI S-PRESSO

17

Inquiry : The seller can respond to the buyer's inquiries.

localhost:8080/inquiry/list

Problems - LeetCode

Car Sales Management

Home Profile MyCars BookedCars Sold Cars Inquiries Settlements Logout

Inquiry List

Car Id	Buyer Id	Inquired On	Inquiry	Response	Responded On
CAR0362359	BUYER64901	2023-08-02	how is it?		Respond
CAR0362353	BUYER64901	2023-08-01	ok	yes	2023-08-01 Respond

Settlements: Same as Admin, the Seller can find all the settlement details here.

localhost:8080/booking/settlements

Problems - LeetCode

Car Sales Management

Home Categories Buyers Sellers PostedCars BookedCars Sold Cars Settlements Profile Logout

Settlement Details

payment Id	Seller Id	Settlement Date	Sale Amount	Commission(%)	Commission Amt	Settlement Amt
BOOK362353	SELER64901	01/08/2023	\$ 7000.0	10.0	\$ 700.0	\$ 6300.0

Source Code

```
@PostMapping("/login/admin")
public String adminLogin(Login login, Model model, HttpServletRequest request) {
    if (login.getEmail().equals("admin") &&
        login.getPassword().equals("admin")) {
        model.addAttribute("name", "Admin");
        request.getSession().setAttribute("id", "Admin");
        request.getSession().setAttribute("userid", "Admin");
        request.getSession().setAttribute("usertype", "admin");
        request.getSession().setAttribute("name", "Admin");
        return "redirect:/account/home";
    } else {
        model.addAttribute("adminmsg", "Invalid Login Credentials");
        return "login";
    }
}
```

This code checks the credentials of the user logged in. If the credentials match the page it redirects to the account home page, if not, then displays invalid Login credentials message. The same code will be similar to all the users(Buyer, Seller and Admin).

```
@RequestMapping("/list")
public String bookingList(Model model, HttpServletRequest req) {
    String utype = req.getSession().getAttribute("usertype").toString();
    String uid = req.getSession().getAttribute("userid").toString();
    if (utype.equals("buyer"))
        model.addAttribute("datalist",
            payRepo.findAllByBuyerIdAndStatusEquals(uid, "Booked").get());
    else if (utype.equals("seller"))
        model.addAttribute("datalist",
            payRepo.findAllBySellerIdAndStatusEquals(uid, "Booked").get());
    else
        model.addAttribute("datalist",
            payRepo.findAllByStatus("Booked").get());

    return "booking_list";
}
```

This code displays a booking list based on the type of the user logged in.

The booking creates and update request calls the carRepo function and update the existing data.

```
public String saveBooking(Payment obj, HttpServletRequest req) throws
IOException {
    Optional<Payment> idobj = payRepo.findTopByOrderByIdDesc();
    String id = null;
    if (idobj.isPresent()) {
        int idnum =
            Integer.parseInt(idobj.get().getPaymentId().substring(5));
```



```

        idnum++;
        id = "BOOK3" + idnum;
    } else {
        id = "BOOK362353";
    }
}

```

The above code saves the booking posted. The booking Id starts with the number 362353 initially and increases by one for every booking.

- All the model classes have variables, constructors, setters, and getters.
- All the repository classes extend the Spring function called CRUD that extends the respective model class.

```

• public static void saveFile(String uploadDir, String fileName,
    MultipartFile multipartFile) throws IOException {
    Path uploadPath = Paths.get(uploadDir);

    if (!Files.exists(uploadPath)) {
        Files.createDirectories(uploadPath);
    }

    try (InputStream inputStream = multipartFile.getInputStream()) {
        Path filePath = uploadPath.resolve(fileName);
        Files.copy(inputStream, filePath,
            StandardCopyOption.REPLACE_EXISTING);
    } catch (IOException ioe) {
        throw new IOException("Could not save image file: " + fileName,
            ioe);
    }
}

```

The above code is used to upload car images. It uses the MultipartFile and Paths that are provided by the Spring.

```

spring.data.mongodb.uri=mongodb://localhost:27017/carsales

spring.autoconfigure.exclude=org.springframework.boot.autoconfigure.jdbc.DataSourceAutoConfiguration

```

Database URL and using the spring autoconfigure feature.

All the HTML files are places under the static folder.