

Vehicle Rental Management System

Entities:

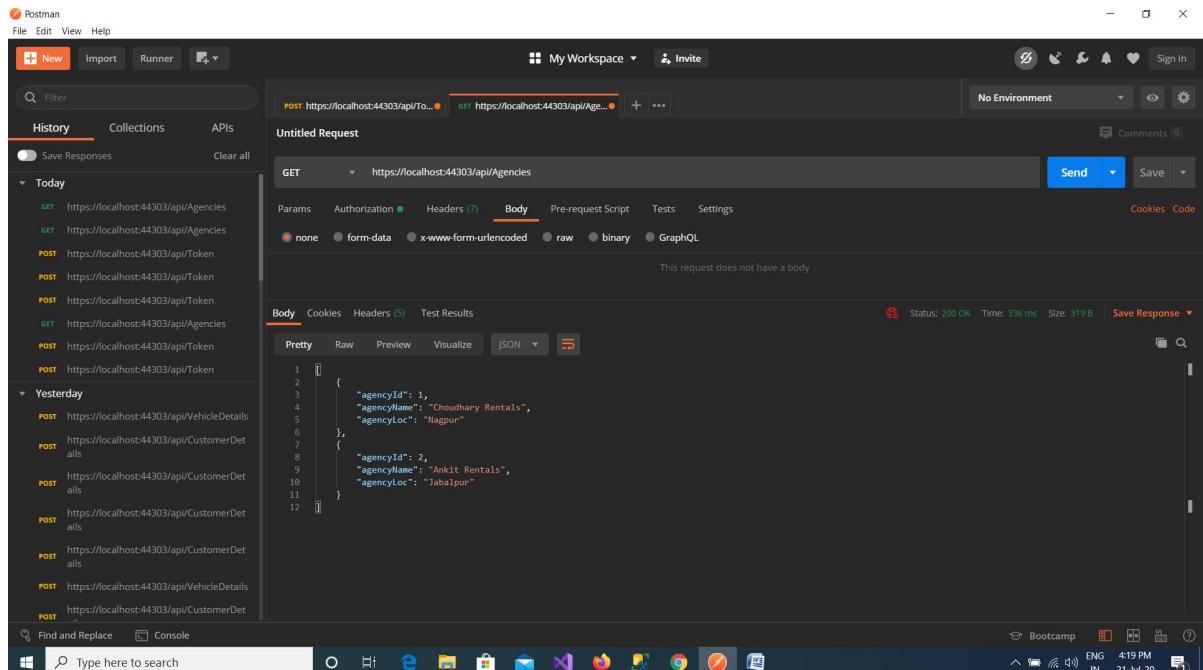
1. Agency
2. Customer
3. Vehicle

Controllers Implemented:

1. Agency
2. Customer
3. Vehicle
4. Rent Details
5. Status

Functionalities of each controller:

1. **Agency:** - Agency is the authorized one. Admin can retrieve Vehicle details and can add, update and delete data. Also, Admin can retrieve rent details And Status data from model.



The screenshot shows the Postman application interface. On the left, the 'History' tab displays a list of API requests made today and yesterday. In the center, an 'Untitled Request' window is open for a 'GET https://localhost:44303/api/Agencies' call. The 'Body' tab is selected, showing a JSON response with two agency objects:

```
1 [  
2   {  
3     "agencyId": 1,  
4     "agencyName": "Choudhary Rentals",  
5     "agencyLoc": "Ragpur"  
6   },  
7   {  
8     "agencyId": 2,  
9     "agencyName": "Ankit Rentals",  
10    "agencyLoc": "Jabalpur"  
11  }  
12 ]
```

The status bar at the bottom right indicates a 200 OK status, 336 ms time, and 319 B size.

Fig: Agency controller

2. **Customer:** - Customer Controller can retrieve data of Customer and can add or update new customer data and can delete the previous data if not needed.

```

[{"customerName": "Deepanshu", "customerLoc": "Indore", "customerPhone": "+917251918796", "customerLicense": "Yes"}, {"customerName": "Ankit Choudhary", "customerLoc": "Chhindwara", "customerPhone": "+91773252986", "customerLicense": "Yes"}, {"customerName": "Nitish", "customerLoc": "Delhi", "customerPhone": "+919876543210", "customerLicense": "No"}]

```

Fig: Customer Controller

3. Vehicle: - Vehicle Controller can retrieve Vehicle's information, whether it is available or not and its status n details can be changed by agency.

```

[{"vehicleType": "Two Wheeler", "vehicleCost": 15, "available": null, "agencyId": 1}, {"vehicleName": "Swift", "vehicleType": "Four Wheeler", "vehicleCost": 25, "available": "Yes", "agencyId": 2}, {"vehicleName": "Yezza", "vehicleType": "Four Wheeler", "vehicleCost": 35, "available": "No", "agencyId": 1}

```

Fig. Vehicle Details

- 4. Rent Details:** - Rent details Controller will retrieve data from Customer and Vehicle model and assigns Customer vehicles for rent by checking it is available or not.

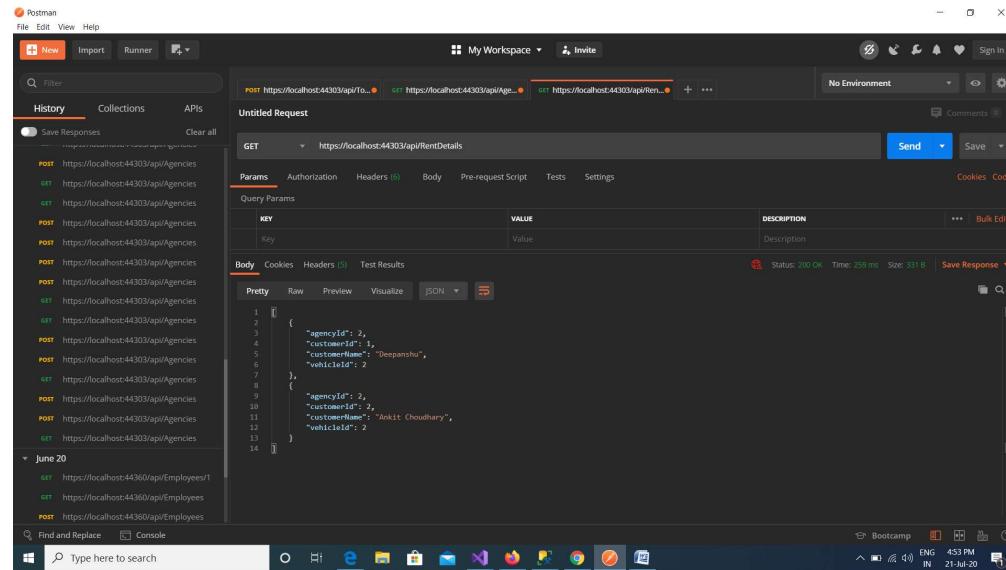


Fig: Rent Details

5. **Status Controller:** Status controller will give the details where the vehicle rented is being received by the city branch of that agency or not and basic information.

```

[{"statusId": 101, "customerId": 1, "fromLoc": "Chhindwara", "toLoc": "Indore", "totalCost": 10000, "received": "yes", "customer": null}]

```

Fig 5. Status Controller

Conclusion:-

By using Entity Framework Data from Database has been scaffolded into models.

From those models, data is used by the API's (Controller) to function assignments of vehicle to customers and maintain the details.