

Vehicle Rental System

Design and Develop a Monolith Console based Vehicle Rental system by understanding various use cases from the Admin and borrower point of view. You are allowed to improvise and add more real-time use relevant cases to to each task if possible.

Vehicle rental system will display a catalogue of of available Cars and Bike and end-users can book a vehicle for a particular date

Module A : Sign and Signup

Application must authenticate both Borrower and Administrator taking EmailID and password and display a welcome menu based on their role.

Module B : Vehicle Inventroy

Admin can Add a Vehicle (Car/Bike) ,Modify Vehicle Specifications such as Available Count and Delete a Vehicle.

- a) Admin can view list of all Vehicles sorted by Name or Available Number
- b) Admin can search a Vehicle by name or NumberPlate
- c) Admin can change the Security deposit amount for borrower

Module C :Renting a Vehicle

Renters can view a list of all Vehicles available, Select the Vehicle by Name or ID and checkout . Renter can borrow a maximum of one car and one bike at a time

- a) Add a Vehicle into checkout cart or remove them
- b) Can rent only one Car and Bike at a time
- c) Can rent a car/bike only if minimum security deposit of rupees 3000 is maintained for bike and 10000 for Car

Module D : Fine and Regulations

Each Borrower has deposited 30000 rupees Initially into the Rent Service as a Caution

deposit . The amount will be refunded on returning the vehicle. The Amount will be reduced if there is any damage or loss of vehicle

1. Vehicle rented must be returned same day
2. Vehicle that run more than 500 kms a day will be charged additional 15% of total rental change
3. Car damages are labels as LOW,MEDIUM,HIGH and based on that we will fine 20% , 50% and 75% of total fine amount. Get this damage label from user
4. Car must be serviced for every 3000KMS and bike must be services for every 1500 .Unserviced vehicle must not be displayed in cataloge

Fine amount can either by paid by cash or reduced in security deposit

Regulations:

- a) Borrower can extend the tenure up to two times only consecutively for a Vehicle and it should be consecutive days
- b) Borrowers can either extend the tenure, exchange the car or mark a Vehicle as lost during every transaction

Module E : Reports

Admin can view below reports

1. List of all vehicle that are due for Service
2. List of all vehicle their details sorted by their Rental price,
3. Vehicle can be searched by Name and can be filtered by Car or Bike filter
4. List of Vehicles that are rented out or not been rented at all

Reters can view:

1. List of previous rentals

