

Car Rental Management System

The Car Rental Management System is a package designed to automate the process of managing car rental services. It utilises all the fundamental concepts of object-oriented programming. It provides a framework for handling various aspects of car rental operations, including vehicle inventory management, customer reservations, rental transactions and administrative tasks.

The objects of the package encapsulate data and behaviours. This design allows for flexibility and ease of maintenance, making it adaptable to the evolving needs of car rental businesses.

The key features of the package include Vehicle Management, Reservation System, Rental Transactions, Customer Management and Administrative Tools.

Overall, the Car Rental Management System offers a comprehensive solution for optimizing car rental operations through efficient resource utilization, and enhanced customer satisfaction. By leveraging the concepts of object-oriented programming, with abstraction, encapsulation, inheritance and usage of Standard Template Libraries.

Customer
<ul style="list-style-type: none">- Sno- Name- contactNumber- ID
<ul style="list-style-type: none">+ getName()+ getContactNumber()+ getID()+ setName()+ setContactNumber()+ setID()

Transaction
<ul style="list-style-type: none">- Reservation- advance- extra- totalAmount- balance- paid

Vehicle
<ul style="list-style-type: none"> - sno - company - model - regNumber - year - noOfSeat - airConditioned - type - available
<ul style="list-style-type: none"> + getSno() + getCompany() + getModel() + getRegNumber() + getYear() + getNoOfSeat() + getAirConditioned() + getAvailable() + setType() + setSno() + setCompany() + setModel() + setRegNumber() + setYear() + setNoOfSeat() + setAirConditioned() + setType() + setAvailable()

Driver
<ul style="list-style-type: none"> - name - mobileNumber - licenseNumber - age
<ul style="list-style-type: none"> + getName() + getMobileNumber() + getLicenseNumber() + getAge() + setName() + setMobileNumber() + setLicenseNumber() + setAge()

Reservation
<ul style="list-style-type: none"> - startDate - endDate - hiredDriver - Driver - Vehicle - Customer
<ul style="list-style-type: none"> + getStartDate() + getEndDate() + getHiredDriver() + setStartDate() + setEndDate() + setHiredDriver() + approxAmount()