

Online Car Rental Reservation System

A car rental company operates a number of rental locations. The business operation of the company is described as follow. **The description is not complete and the company is flexible to consider any good improvement proposals.**

Vehicles can be taken from one location and returned to the same or different location with an additional charge. Although the company is, at present, concerned only with passenger cars, it may branch out into other forms of vehicles rentals in the future.

The company has several different makes of cars in its rental fleet, from different manufactures. Each make may have several models. The models are grouped into small number of price classes. The customer must be able to select the make and the model. If the selected car is not available, the system should display a message telling the customer that the car is rented out and let the customer select another one or suggest similar models of the different make.

The company also has a number of different rental plans.

- Daily unlimited miles plan
- Weekend 10% discount plan
- And maybe more...

It is important to have information available on the models of the car, such as automatic, or manual gear change, two or four doors, and sedan or hatchback.

The prices may be different for different options.

Currently customers make reservations in person or by phone using reservation form. The salesperson processes those forms manually and archive them in the cabinet. No deposit required at the time of reservation. The reservation is voided if customer doesn't show up to sign the contract for more than a given period of time. Such reservation is honored only if there are still cars available to satisfy the request.

Sometimes a customer wishes to make a block reservation for several cars and to have the invoices for all rentals on the reservation handled together. As soon as a car checked out to a customer, an invoice is opened. A single invoice may cover one or more rentals. Normally a customer will settle the invoice when the car is returned but, in some cases, the invoice must be sent to a company. When the customer pays by credit card, the rental charge will be processed through a credit card processing company.

A car may or may not be available for rental on a given day. Rental cars need frequent preventive maintenance, and in addition, any damage to a car has to be repair as soon as possible. The company wants to keep track of the rental car purchase, repair, maintenance, and disposal information for business and tax purposes.