**Case II, a car rental system**

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**1 FARADAY CAR RENTAL COMPANY**

The well-known car rental company called Faraday has decided to set up an online booking system for rental cars. Access to the system is via a web service for third-party solutions and via a web application for employees in travel agencies.

**1.1 DOWNLOAD**

Car hire from Faraday can be picked up from airports or hotels.

Airports are identified by their three-letter IATA airport code. Time zone information should be stored for each airport.

Hotels are identified by a 6-digit number. Hotels also have names, addresses and star ratings as well as time zone.

Rental cars are identified by their license plate, ten alphanumeric characters cover the license plates in the countries where Faraday operates. In addition, rental cars have a type from 'A' to 'F', which indicates the price and number of seats.

The driver is identified by his driving license number and name as in the passport. The driver must be at least 25 years old.

**1.2 BOOKINGER**

When a rental car is booked, the pick-up location (airport or hotel) must be stated as well as the time of pick-up (time and date) and delivery time. If the place of delivery is different from the place of collection, an additional fee will be charged, depending on the distance between the places.

**1.3 THE APPLICATION**

The following tasks must be handled by the web application.

• The employee must be able to see a list of available rental cars including car type in a city in a given time period.

• The employee must be able to make a reservation for up to 3 weeks of a specific car, either with the same pick-up and delivery location or with two different locations. An error message must be returned to employees if the car is no longer available.

• The employee must be able to see a reservation, given the driving license number from the reservation.

• The employee must be able to cancel a reservation, given the driving license number from the reservation.

See <http://www.photius.com/wfb2001/airport_codes_alpha.html>