

MANUFACTURER relation					
Manufacturer Name	Manufacturer Country	Sales Rep Name	Sales Rep Telephone		
CAR Relation					
Car Serial Number	Model	Year	Class	Manufacturer Name	
MAINTENANCE relation					
Repair Number	Car Serial Number	Date	Procedure	Mileage	Repair Time
CUSTOMER relation					
Customer Number	Customer Name	Customer Address	Customer Telephone		
RENTAL relation					
Car Serial Number	Customer Number	Rental Date	Return Date	Total Cost	

FIGURE 5.18
Lucky Rent-A-Car relational database

EXAMPLE: LUCKY RENT-A-CAR

Figure 5.18 shows the relational database for the Lucky Rent-A-Car example described earlier. There is a one-to-many relationship from manufacturers to cars and another one-to-many relationship from cars to maintenance events. The former requires the manufacturer primary key, Manufacturer Name, to be placed in the CAR relation as a foreign key. The latter requires the car primary key, Car Serial Number, to be placed in the MAINTENANCE relation as a foreign key. The many-to-many relationship among cars and customers requires the creation of a new relation, the RENTAL relation. Each record of the RENTAL relation records the rental of a particular car by a particular customer. Note that the combination of the Car Serial Number and Customer Number attributes is not sufficient as the primary key of the RENTAL relation. A given customer might have rented a given car more than once. Adding Rental Date to the primary key achieves the needed uniqueness.