TESTING YOUR UNDERSTANDING

Exercise 9-1

The ever–useful "customer orders product" example again—there is always something new to discover. Design the table that will represent the Order class in Figure 9-14. Consider constraints, primary and foreign keys, and updating rules.
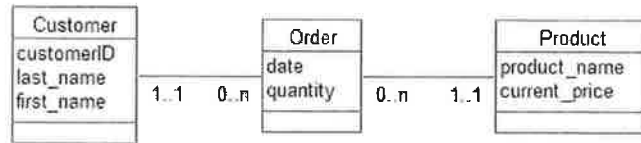

Figure 9-14. Model for customers placing orders

Exercise 9-2

A car sales yard needs to keep information about makes and models of cars that are available, and also the registrations of the individual cars they have in stock. For example, Ford Siestas are available in sedans and hatchbacks, and they currently have a blue sedan with registration TC545 in stock. For some models you might be able to choose automatic or manual transmission and some come with different capacities (e.g., 1.5 l or 2.0 l). Think about the options available for setting up tables for this situation.

TESTING YOUR UNDERSTANDING

Exercise 10-1

Figure 10-15 shows a data model describing the meal delivery problem considered in Chapter 3. It shows the available meals and which ones appear in each order.
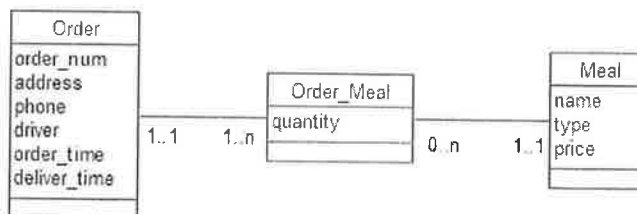

Figure 10-15. Data model for meal delivery

Some of the requirements identified by the client include the following:

  a) Determine the cost of a specific order.

  b) Prepare a list of undelivered orders.

  c) Determine the income from different types of meals in a given month.

Determine the queries that would provide the required information. (Caution: after such a brief introduction to queries it is not reasonable to expect that a novice would be able to write down the queries in full, but do think about what joins might be required, which rows need to be selected, and so on.) To help you think about the problem, Figure 10-16 shows the database tables and some possible data. In the Order_Meal table, order and meal are foreign keys to the Orders and Meals tables respectively.

Figure 10-16. Tables for meal delivery