Name: Façade

What it does: Provides a higher-level interface for a set of interfaces in a subsystem

Problem: A simple interface is needed to a complex set of classes

Participants: Façade. In a system, the Façade object relays requests from other objects in the system to the appropriate subsystem object

Subsystem classes. In a system these objects are assigned tasks by the Façade object and carry out the required functionality

Example: Example Façade class: HousePurchase
Example subsystem classes: Purchaser, Vendor, Property, Mortgage

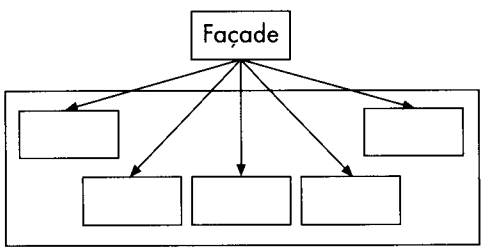

Figure 9.20 *A simple example of the Façade pattern*

Chapter summary

This chapter looks at the principal activities that take place during the overall design of the system. The models produced during design activities show how the different elements of the system will work together. This chapter is concerned with aspects of design that affect the whole system. The layered model shows the overall structure of the software architecture logically and the dependencies between the layers. The component diagram shows the physical software files and their dependencies. Deployment diagrams model the hardware units and their links. Deployment diagrams can also be used to show where the software files are physically located on the hardware, i.e. map the component diagram to the deployment diagram. A user interface must be designed so that it is appropriate for the type of users involved. For an information system, such as the Wheels system, system designers must decide how to deal with persistent data. If a relational database is selected the designer must understand how to link it to the object-oriented application, and how to convert the class diagram to a set of relational tables. Finally, the chapter looks