

Figure 6.6 Completed class diagram with attributes and operations

Interaction diagrams

We have already mentioned in Chapter 4 that objects collaborate to achieve the functionality required of them by sending messages. Interaction diagrams model the messaging between a collaboration of objects that will take place in the execution of a specific scenario.

By the time we come to do the interaction diagrams we have already done a lot of analysis: we know what the system has to do, we know about the classes and attributes, and we have had our first real ideas about the nature of the relationships between classes — they have to be able to support the collaborations between objects that we specified in the CRC analysis. We have also refined the broad outlines of the class responsibilities into a set of operations and attributes that enable the classes to fulfil their responsibilities.

However, although we now have an idea of which objects are needed to produce the required behaviour and a high-level view of how objects need to collaborate to do this, we have no real idea of the sequence of messages this involves. Use case scenarios describe the functionality of a use case in terms of a sequence of events. We