| Conditions | Rules | | |
|---|-------|---|---|
| | 1 | 2 | 3 |
| Customer has hired ≥ 5 bikes during the past year | Z | Υ | Y |
| Current hire is for ≥ 3 bikes | - | N | Υ |
| Actions | | | • |
| No discount | Х | | |
| 15% discount | | Χ | |
| 25% discount | | | Х |

Figure 6.17 Example of a decision table showing hire discounts

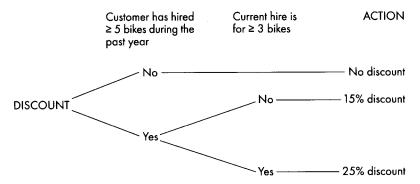


Figure 6.18 Example of a decision tree showing hire discounts

Using the CRC cards and interaction diagrams in system development

CRC cards are used to partition system behaviour between the classes. CRC modelling, by walking through the scenarios, has made us revisit all of our decisions so far — this is part of the iterative nature of object-oriented design. During CRC modelling we may well discover classes and attributes we didn't find doing a noun analysis because we are looking at the classes from a different point of view.

Each class of objects is responsible for some part of the system behaviour. However, for the system to produce a large chunk of required behaviour, for example that specified in a use case, objects must collaborate. The CRC technique is used to discover how classes collaborate to achieve the behaviour of the use cases. Interaction diagrams are used to document in detail the decision arrived at in CRC analysis. CRC cards talk about responsibilities and collaborations. Interaction diagrams talk about messaging between objects.