are there to help the developer, not to dictate what should or should not be included in a diagram.

3 How do I model activities that are a mixture of human actor action and computer action like calculating the remaining deposit?

It is quite straightforward to specify that some actions are manual (e.g. 'Check bike') and some are done using the system (e.g. 'Check return date'). This can be done with swimlanes, as in Figure 8.10 where the mechanic checks the bike and the computer checks the return date.

In the case where you want to show that one activity is a mixture of human and system actions, you would have to split the activity into two. In Figure 8.10 the activity of dealing with the return of a deposit is split into 'Calculate amount of deposit to return' (Computer) and 'Return deposit' (Receptionist).

Chapter summary

This chapter introduces activity diagrams, which are used at various stages of the development process to model the flow of actions and the decisions that cause them to take place. They can be used in the early stages of development to describe high level business workflows, then later to model use cases, and finally to clarify the details of individual operations on classes.

Activity diagrams can model sequencing, selection and repetition of activities. They can also show where activities may be carried out in parallel. It is possible to divide activity diagrams into swimlanes, indicating which person, organization or object has responsibility for which activities in the diagram. During detailed design it is also possible to indicate the input that an activity needs from a specific object, and how an object is affected by the output from an activity. However, activity diagrams are often most useful when used in their simplest form as a means for the developer and client to build a shared understanding of how the system works.

Bibliography

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