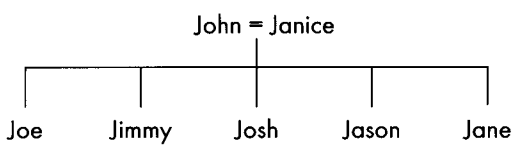
The Unified Modelling Language (UML)

The Unified Modelling Language, or UML, is a set of diagrammatic techniques, which are specifically tailored for object-oriented development, and which have become an industry standard for modelling object-oriented systems. The UML grew out of the work of James Rumbaugh, Grady Booch and Ivor Jacobson, and has been approved as a development standard by the Object Management Group. Before discussing the UML in detail, we should explain briefly what we mean by 'modelling' in this context, and why it is an important part of software system development.

Modelling

Architects and engineers have always used special types of drawing to help them to describe what they are designing and building. In the same way, software developers use specialized diagrams to model the system that they are working on throughout the development process. Each model produced represents part of the system or some aspect of it, such as the structure of the stored data, or the way that operations are carried out. Each model provides a view of the system, but not the whole picture.

As an example, let us consider a small girl, Jane, and imagine that we have a photograph of her. The photograph is one possible model of the real-life Jane; it tells us what she looks like, and may give some idea of her character. Figure 1.4 shows two more possible models of the real-life Jane.



(a)

Jane Jones

Date of birth:	4th April 1997
Address:	21 Parsons Drive, Letterbury
School:	Letterbury Junior School
Class:	3B

(b)

Figure 1.4 *Different models showing different information about one real-life person*