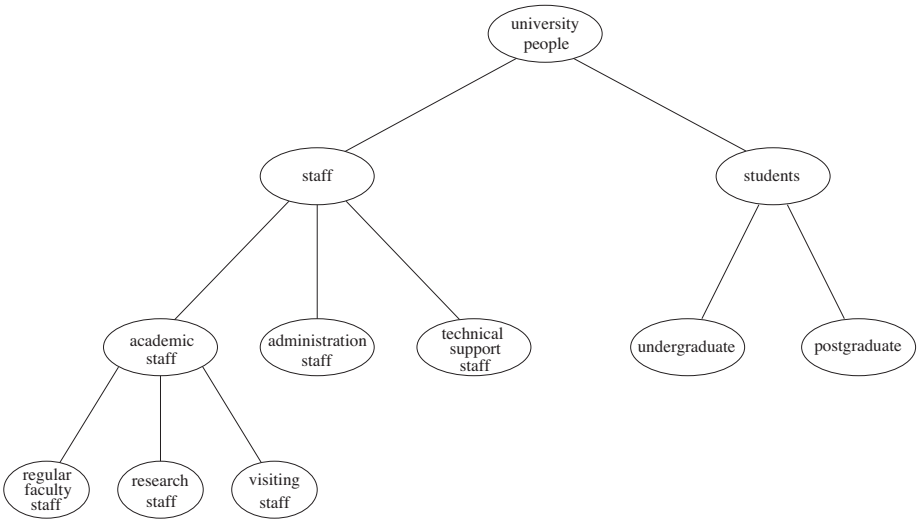

Figure 1.3: A hierarchy

- specifications of logical relationships between objects (every department must include at least ten faculty members).

In the context of the web, ontologies provide *a shared understanding of a domain*. Such a shared understanding is necessary to overcome differences in terminology. One application's zip code may be the same as another application's postcode. Another problem is that two applications may use the same term with different meanings. In university A, a course may refer to a degree (like computer science), while in university B it may mean a single subject (CS 101). Such differences can be overcome by mapping the particular terminology to a shared ontology or by defining direct mappings between the ontologies. In either case, it is easy to see that ontologies support semantic interoperability.

Ontologies are useful for the organization and navigation of websites. Many websites today expose on the left-hand side of the page the top levels of a concept hierarchy of terms. The user may click on one of them to expand the subcategories.

Also, ontologies are useful for improving the accuracy of web searches. The search