228 XML Basics

A reference to external structuring documents looks like this:

```
<!DOCTYPE book SYSTEM "book.dtd">
```

Here the structuring information is found in a local file called book.dtd. Instead, the reference might be a URL. If only a locally recognized name or only a URL is used, then the label SYSTEM is used. If, however, one wishes to give both a local name and a URL, then the label PUBLIC should be used instead.

## A.1.2 Elements

XML elements represent the "things" the XML document talks about, such as books, authors, and publishers. They compose the main concept of XML documents. An element consists of an *opening tag*, its *content*, and a *closing tag*. For example,

```
<lecturer>David Billington/lecturer>
```

Tag names can be chosen almost freely; there are very few restrictions. The most important restrictions are that the first character must be a letter, an underscore, or a colon, and that no name may begin with the string "xml" in any combination of cases (such as "Xml" and "xML").

The content may be text, other elements, or nothing. For example,

```
<lecturer>
<name>David Billington</name>
<phone>+61-7-3875 507</phone>
</lecturer>
```

If there is no content, then the element is called *empty*. An empty element like

```
<lecturer></lecturer>
```

can be abbreviated as

```
<lecturer/>
```