Here are some examples of document type definition (DTD). The DTDs are written in **bold** and *italic* fonts, and the annotations are written in roman. You can refer to [http://www.xml.com](http://www.xml.com) if you want to learn more about XML.

Ex1. Paper
Suppose that there is a special kind of paper that must have a title, an author, and a body. We assign the author a unique ID and may include his or her address as an optional attribute. The body consists of one or more chapters, followed by a series of references. Because this paper belongs to the company “XYZ international,” a copyright claim may appear in the paper.

```xml
<!DOCTYPE docpaper [
  <!ELEMENT paper (title, author, body)>
  <!ELEMENT title (#PCDATA)> 
  <!ELEMENT author (#PCDATA)> 
  <!ELEMENT body (chapter+, references) >
  <!ELEMENT chapter (#PCDATA)> 
  <!ELEMENT references (#PCDATA)> 
  <!ATTLIST author
    authorid ID #REQUIRED
    address CDATA #IMPLIED >
<!ENTITY copyright "XYZ international. All rights reserved." >
]>
```
Ex2. Catalog Entry

Consider a catalog entry for a computer. It has a type that specifies whether this is a laptop or a desktop computer. In the catalog, the manufacturer, the line, the model, and the specifications must be listed. Specifications consist of speed, memory, disk, weight, and price.

<!DOCTYPE doccat [  
<!ELEMENT computer (manufacturer, line, model, specifications)>  
<!ELEMENT line (#PCDATA)*>  
<!ELEMENT model (#PCDATA)*>  
<!ELEMENT specifications (speed, memory, disk, weight, price)>  
<!ELEMENT speed (#PCDATA)*>  
<!ELEMENT memory (#PCDATA)*>  
<!ELEMENT disk (#PCDATA)*>  
<!ELEMENT weight (#PCDATA)*>  
<!ELEMENT price (#PCDATA)*>  
<!ATTLIST computer  
  type  
  CDATA  
  #REQUIRED >  
<!ATTLIST speed  
  unit  
  CDATA  
  #REQUIRED >  
<!ATTLIST memory  
  unit  
  CDATA  
  #REQUIRED >  
<!ATTLIST disk  
  unit  
  CDATA  
  #REQUIRED >  
<!ATTLIST weight  
  unit  
  CDATA  
  #REQUIRED >  
<!ATTLIST price  
  currency  
  CDATA  
  #REQUIRED >  
]>}
Ex3. Service Request

A software company provides technical support service to its customers. A customer can request the service by filing a document. The request consists of the customer information (including the name, the address, and the telephone number) and the task. There is a track number associated with each request. The task can be urgent or normal, and normal is the default.

```xml
<!DOCTYPE docreq [ 
<!ELEMENT request (customer, task)> 
<!ELEMENT customer (name, address, tel)> 
<!ELEMENT name (#PCDATA)+) 
<!ELEMENT address (#PCDATA)+) 
<!ELEMENT tel (#PCDATA)+) 
<!ELEMENT task (#PCDATA)*) 
<!ATTLIST request trackno ID #REQUIRED > 
<!ATTLIST task type (urgent | normal) 'normal' > ]>
```