

DTD Cheat Sheet

Element Occurrence Indicators:

<!ELEMENT article (title , author+ , pn? , p+)>

- ✓ **no indicator** = an element must appear once and only once
- ✓ **+** = indicates an element must appear once, but may repeat
- ✓ ***** = an element may appear zero or more times; it is optional, but if it is used, it may be used as often as necessary
- ✓ **?** = means it can appear either once or not at all; i.e. it is optional, but not repeatable.

Attribute Types:

- **CDATA** – *character data -- ASCII text*
 - <!ATTLIST linegroup n CDATA #IMPLIED>
- **ENUMERATED LIST** – *the attribute value must be one of the series specified*
 - <!ATTLIST note location (foot | end | inline) >
 - or
 - <!ATTLIST note location (foot | end | inline) 'foot' >
- **ID** – a unique identifier for this element instance. Must begin with a letter, underscore or a colon
- **IDREF** – a reference to an ID attribute which takes the same name as the ID (used to create a link)
- **IDREFS** – a list of IDREF separated by spaces

Attribute Values:

- must be used **#REQUIRED**
- whether it is optional **#IMPLIED**
- it is predetermined **#FIXED**

Sample DTD and Document Instance

```
<?xml version="1.0"?>
<!DOCTYPE article [
<!-- this is a simple dtd for articles-->
<!ELEMENT article (title , author+ , pn* , p+)>
<!ELEMENT title (#PCDATA )>
<!ELEMENT author (#PCDATA | bionote )*>?
<!ELEMENT bionote (#PCDATA )>
<!ELEMENT p (#PCDATA | note | author )*>
<!-- pn stands for page number -->
<!ELEMENT pn EMPTY>
<!ELEMENT note (#PCDATA )>
]>
<article>
<title>My first Article</title>
<author>Susan Schreibman</author>
<p>paragraph I</p>
<p>paragraph II</p>
</article>
```

