In-Class Exercise #3
ECT 360, Prof. Robin Burke
Fall 2005
In-class: 9/26/2005

Objective:
Parameterize a simple DTD

What to do:
In groups of two or three, create a parameterized DTD that can validate the same documents as the two DTDs below. You will need to use INCLUDE and IGNORE sections as well as parameterized element names and content models. These sections should themselves be parameterized so that to change document types, all you need to do is alter two parameter entities.

DTD 1: General business card

<!-- Root element and sub-elements -->
<!ELEMENT business-card (business-info, personal-info)>
<!ELEMENT business-info (business-name, address, contact*, logo?, text*)>
<!ELEMENT personal-info (person-name, job-title)>

<!ELEMENT business-name (#PCDATA)>
<!ELEMENT job-title (#PCDATA)>

<!-- Address element -->
<!ELEMENT address (street, city, state, zip)>
<!ELEMENT street (#PCDATA)>
<!ELEMENT city (#PCDATA)>
<!ELEMENT state (#PCDATA)>
<!ELEMENT zip (#PCDATA)>

<!-- Contact element -->
<!ELEMENT contact (#PCDATA)>
<!ATTLIST contact type (email | fax | phone | web) #REQUIRED>

<!-- Person name element -->
<!ELEMENT person-name (last-name, first-name)>
<!ELEMENT first-name (#PCDATA)>
<!ELEMENT last-name (#PCDATA)>

<!-- Logo and text -->
<!ELEMENT logo EMPTY>
<!ATTLIST logo src CDATA #REQUIRED>

<!ELEMENT text (#PCDATA)>
<!ATTLIST text type (endorsement | motto | services) #REQUIRED>

DTD 2: Simple business card

<!ELEMENT business-card-simple (business-info, personal-info)>
<!ELEMENT business-info (business-name, address, contact*)>
<!ELEMENT personal-info (person-name, job-title)>

<!ELEMENT business-name (#PCDATA)>
<!ELEMENT job-title (#PCDATA)>
<!ELEMENT contact (#PCDATA)>

<!ELEMENT address (street, city, state, zip)>
<!ELEMENT street (#PCDATA)>
<!ELEMENT city (#PCDATA)>
<!ELEMENT state (#PCDATA)>
<!ELEMENT zip (#PCDATA)>

<!ELEMENT person-name (last-name, first-name)>
<!ELEMENT first-name (#PCDATA)>
<!ELEMENT last-name (#PCDATA)>
What to turn in:
Be prepared to share your DTD with the class.

Hints:
- This is not a test. Feel free to ask questions and to use your book.