DTD Exercises

Esta semana nos toca cuestionario sobre DTD, espero que no os agobiéis. Para facilitaros la labor os he incluído un pequeño resumen en el que he recopilado ejemplos de DTD al que podéis acceder desde aquí:

DTD-Resumen

Tenéis que hacer los ejercicios del apartado: DTD-Exercises. Además os dejo los enlaces siguientes:

1. **Tutoriales sobre DTD**

   Enlaces en español:
   a. https://www.mclibre.org/consultar/xml/lecciones/xml-dtd.html
   b. https://www.abrirllave.com/dtd/

   Enlaces en inglés:
   c. https://www.w3schools.com/XML/xml_dtd_intro.asp
   d. https://www.tutorialspoint.com/es/xml/xml_dtds.htm

2. **Videos sobre DTD en español**

   dtd - parte 1
   a. https://www.youtube.com/watch?v=jlls7U3Jn04

   dtd - parte 2
   b. https://www.youtube.com/watch?v=Oowo_-loYyY

   dtd - parte 3
   c. https://www.youtube.com/watch?v=IeieG-hgBKo

   mi primer dtd
   d. https://www.youtube.com/watch?v=EfnWCeQNTQI

3. Lee el siguiente artículo en el que se explica cómo validar XML y DTD con Copy Editor
   a. https://www.abrirllave.com/dtd/como-validar-con-xml-copy-editor-un-documento-xml-asociado-a-una-dtd.php

4. Se recomienda hacer los ejercicios incluidos en los siguientes enlaces:
   a. https://www.abrirllave.com/dtd/ejercicios-resueltos.php
   b. https://www.mclibre.org/consultar/xml/ejercicios/dtd.html

DTD Exercises -

1. A simple address book

Someone wishes to design an address book in XML. For each entry of the address book, one wants to store the following information:

a. The person name
b. Home address
c. Telephone number
d. E-mail address
e. Age
f. Marital Status (C,S,V,D)

To do list:

a. Write a DTD for the address book.
b. Write a valid XML file with at least two entries. Put all in a file and save as ex1.xml.

2. An advanced address book

Make a professional address book improving the address book created in the previous exercise.
For each entry of the address book we want to store the following informations:

a. The person first name and last name.

b. Home address (street, no, zip, country)

c. Telephone number

d. E-mail addresses (it can be more than one)

e. Company. The following informations must be stored:
- Company name
- The list of company web sites. For each web site you must store the following:
  - The name of the site
  - URL

Requirements:

a. Write a new version of the DTD and save as Ex2.dtd.

b. Write a valid XML file with at least two entries. Write the corresponding DOCTYPE declaration in the XML file. Save as ex2.xml and validate the file with XML Copy Editor.

3. Design and implementation

Look at the following XML file:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<cd_review_list>
 <cd_review>
  <author>Joe</author>
  <review>
   I heard all of the latest reports of the forthcoming which has been since
released, Silenoz said that it was going to be the most apocalyptic and
bombastic CD. To be honest, I think it's more majestic, symphonic and
grandiose. ...
  </review>
  <author>Dimmu Borgir</author>
  <cd>
   <author>Dimmu Borgir</author>
   <title>Death Cult Armageddon</title>
  </cd>
 </cd_review>
 <cd_review>
  <author>Alex</author>
  <review>
   Whoa, the Dutch team has changed quite a bit... From the beginning of the
opening "Grip" you realise that the guitars and bass sound very modern, hm.
Add the harsh voice of George Oosthoek and you have a completely un-
atmospheric atmosphere, which...
  </review>
  <author>Orphanage</author>
  <cd>
```

```
    <author>Orphanage</author>
    <title>Inside</title>
   </cd>
 </cd_review>
</cd_review_list>
```

Requirements:
> *a.* Write a DTD for this document model. Save the file as ex3.dtd.
> *b.* Validate the file with XML Copy Editor.

4. Encode structure in DTD.
The following XML code is taken from a catalog. Add an internal DTD.

```
<?xml version="1.0"?>
<parts>
 <part>
  <name>Widget</name>
  <catalog.number>11037</catalog.number>
  <price.code>4</price.code>
  <quantity>d</quantity>
 </part>
 <part>
  <name>Bolt</name>
  <catalog.number>11497</catalog.number>
  <thread>w</thread>
  <price.code>1</price.code>
  <quantity>100</quantity>
 </part>
 <part>
  <name>Screw</name>
  <catalog.number>10020</catalog.number>
  <type>countersunk</type>
  <price.code>7</price.code>
  <quantity>c</quantity>
 </part>
</parts>
```

> *a.* Save the file as ex4.xml.
> *b.* Validate the file with XML Copy Editor.

5. Design and implementation
See the following DTD:
```
<!ELEMENT NEWSPAPER (ARTICLE+)>
<!ELEMENT ARTICLE (HEADLINE,BYLINE,BODY,NOTES)>
<!ELEMENT HEADLINE (#PCDATA)>
<!ELEMENT BYLINE (#PCDATA)>
```

```
<!ELEMENT BODY (#PCDATA)>
<!ELEMENT NOTES (#PCDATA)>

<!ATTLIST ARTICLE AUTHOR CDATA #REQUIRED>
<!ATTLIST ARTICLE DATE CDATA #IMPLIED>

<!ENTITY NEWSPAPER "Vervet Logic Times">
<!ENTITY PUBLISHER "Vervet Logic Press">
<!ENTITY COPYRIGHT "Copyright 1998 Vervet Logic Press">
```

Using this DTD:

    a. Write a valid XML file with at least two entries with an internal DTD. Save it as ex5.xml.