

Introduction to XML: Workshop Exercises

These exercises will help ensure that you understand all the syntax discussed in class. You should work all the exercises in writing, even the ones to which the answer is obvious. After that, you should go on the Internet or to any other application to make sure your answers are right. In some cases, there may be alternate solutions that are also correct. If the instructor's answer is different than yours, be sure to inquire about it, as it may be that your answer is also technically correct.

Exercise 1

Use the file "beatles.xml" in a web like <https://codebeautify.org/xmlviewer> and take a look at the options you find there, especially:

- XML tree
- Minify
- Beauty/Format

Describe what is the reason because those two formats (minify and beauty) exist. Write this conclusion in file "ex1.txt".

Exercise 2

Correct this XML document. Save it as "ex2.xml".

```
<!-- XML document with errors --!>
<? xml versión="1.0" encodin = "UTF-8" >
<land>
  <vehicle>bike<vehicle>
  <vehicle>car<vehicleo>
  <vehicle>tractor<vehicle>
<aquatic>
  <vehicle>canoe<vehicle>
<air>
  <vehicle>plane<vehicle>
  <vehicle>helicopter<vehicle>
```

Exercise 3

Correct this XML document. Save it as "ex3.xml".

```
<?xml version="1.0" "yes"=standalone>
<singers>
  <singer>
    <firstName>Paul<firstname>
    <lastname>McCartney</lastname>
  < / name>
  <gender>Male

  <2singer>
    <firstName>Aretha</firstName>
    <lastName>Franklin</lastName>
  </2singer>
< singers >
```

Exercise 4

Store this information into an XML document.

Name	Country	Continent
New Delhi	India	Asia
Lisbon	Portugal	Europe
Tangier	Egypt	Africa

- Use every column as a tag. Save this file as "ex4-a.xml".
- Use *continent* as an attribute of a *country*. Save this file as "ex4-b.xml".

Exercise 5

Store this information into an XML document.

Historical fact description	Day	Month	Year
IBM presents the PC	12	8	1981
Google is established	4	9	1998
Facebook is established	4	2	2004

- Use every column as a tag. Save this file as "ex5-a.xml".
- Create a new XML document where one of those columns is an attribute of other one. Save this file as "ex5-b.xml".

Exercise 6

Without using attributes, create an XML document describing a list of web page bookmarks. The information for each page is the name, a brief description and its URL. The data of the markers are those described in the following table. Save the result as "ex6.xml".

IES Triana Triana High School. http://www.iestriana.com/
Wikipedia The free encyclopedia. http://www.wikipedia.org/
W3C World Wide Web Consortium. http://www.w3.org/

Exercise 7

Using XML create a file (ex7.xml) for representing a teacher's grade book with at least 2 subjects and 10 students for each one of the subjects.

Think about the information and the attributes needed for each tag.

Exercise 8

Using XML create a file (ex8.xml) for representing a metropolitan bus route. You should store the name of the route, the schedule and information about the different stops.

Think about the information and the attributes needed for each tag.

Exercise 9

Using XML create a file (ex9.xml) for representing a cookbook. The cookbook must have at least two recipes and for each one of the recipes we must store information about the different ingredients and the different steps of the cooking process.

Think about the information and the attributes needed for each tag.

Exercise 10

For exercises 7, 8 and 9, create the resulting tree in a single document (trees.doc or trees.odt). Use a tool like *Dia Editor* for drawing the trees.