

XML TUTORIAL:ELEMENTS, ATTRIBUTES AND ENTITIES

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[“http://www.stanmorgan.com/xml/XML_resources.htm”](http://www.stanmorgan.com/xml/XML_resources.htm)

ELEMENTS

An XML document is broken down into elements. Elements structure documents into logical patterns. To order pictures online one selects the **category** of photographs such as science that consists of chemistry molecules, cosmology, laboratory, biology, geology and physics. Then the buyer selects whether to purchase by electronic check, credit or treasury check. This element is the **means of purchase**. After selecting the category the **specific picture** is selected from a presentation! Placing the picture in a **shopping cart** the purchaser is ready to transact the purchase. Once the credit card information is entered the buyer is ready to check out from the shopping cart!

Elements defined within the E-Commerce Site:

1. Category: science
2. Item: picture
3. Means of Purchase: electronic check, credit card or bank check.
4. Shopping cart

ATTRIBUTES

Given the above example the characteristics of the **Category** element was “*science*”. This an **attribute** of the element selected by the user or purchaser. The **Item** element has the attribute “*picture*” again selected by the buyer! The **means of purchase** element have the characteristics: *electronic check, credit card or bank check* the attributes of the purchase!

Attributes defined by the Buyer:

1. science
2. picture
3. electronic check
4. credit card

5. bank check

First exercise:

Identify the Elements and Attributes in the following E-Commerce structure:

The website is based upon purchasing Coffee from a Coffee Club Site. Design an XML format based upon Elements of the XML logical structure. Identify the Elements and Attributes in this XML Coffee Club Site. Suggestions include provide a category for types of coffee, weight purchased, whether caffeine should be a means of selection, what means of purchase is available and selected by the purchaser? Delineate the Elements and Attributes. How are they differentiated?

ENTITIES

Whereas Elements provide a logical structure for an XML document, entities provide the **functionality** of the document! Without entities the documents would have to be atomistic with a separate atom for each chunk of information. Thereby the functions of the document affects the structure of the document. Considering the above E-Commerce site for purchasing photographs, the form of the document is effected by the function of the document! These forms are the Entities that are embedded within the document that are based upon the function of the document!

For the above First exercise perform exercise two:

Second exercise:

1. Determine the Entities within the Coffee Club Website.
2. How do the entities relate to the Elements?
3. How do the entities relate to the Attributes?

