# XML & XTML Test 1 – Fall 2016

On the computer, create a new folder with your name. This folder must contain three xml and three DTD files. Once you finish your test, right-click the folder, point to Send to, and then select Compressed (Zipped) folder. Submit the compressed folder using OmniVox services.

## Create the DTDs

You'll define document type definition structures that are more representative of real-life XML. These structures include mixed content, where you have text and XML interleaved, as well as situations where the author of a document has a choice of content type.

### contacts1.xml and contacts1.dtd

- Locate the contacts 1.xml file.
- In the contacts1.xml file, add a document type declaration that refers to an external system file called contacts1.dtd. In addition, the root element in this document and the element name within the DOCTYPE declaration are the same.
- Create a new document called contacts1.dtd. This file will be where you define your DTD. Because you have a sample XML document, you can base most of your declarations on the text that you have. When designing a DTD, it is much easier to create a sample and let the document evolve before the vocabulary is set in stone.
- In the XML document, <contacts> is the root element.
- Looking at the contacts1.xml document, you can see that the <contacts> element contains a <contact> element. There is only one child element, so this content model should be easy to define.
- Remember to also declare each element that is used within the content model. Declare the <name> element and each of its children. The <first>, <middle>, and <last> elements represent each part of the contact's name. They are all text-only elements.
- The location declaration allows each location to include either an address or the latitude and longitude coordinates.
- Declare the <phone> element in your DTD
- There is a <knows> element in the contacts.xml document
- You can use a truly mixed content model for the description element. This time you'll have some layout elements borrowed from HTML.
- You must include declarations for the <em>, <strong>, and <br/>br> elements

#### Contacts2.xml and contacts2.dtd

Now that you have created the contacts1.dtd, correct and improve the DTD, it is time to integrate cardinality requirements to certain of the elements.

- Locate the contacts2.xml file.
- Save this modified version of contacts 1.dtd as contacts 2.dtd.

#### Contacts3.xml and contacts3.dtd

- Locate the contacts3.xml file.
- Save this modified version of contacts2.dtd as contacts3.dtd.

Once again you revisit the contacts3.dtd document and make further improvements. This time you'll add attributes to some of the elements to provide more information in the document.