BELLEVUE COLLEGE

COMPUTER & TECHNOLOGY PROGRAMS

XML Introduction

eXtensible Markup Language (XML) is one of the most common tools used to transmit data over the internet and between applications. Extend your web authoring expertise in this hands-on class. Topics include: XML document structure, using namespaces, schemas and entities, validating XML documents, applying CSS and XSL transformations, and understanding the role of XML in data-driven web pages.

Who should take this course?

This course is for students with prior HTML and CSS experience who want to learn the fundamentals of building XML documents and XML-based web pages. It is also a required course for the Web Development Certificate Program.

Course Objectives

- Create a well formed XML document to store data.
- Create valid XML data formats and types using namespaces, document type definitions (DTDs), and Schemas.
- Apply CSS to an XML document to format the data being presented.
- Transform an XML document into another file type using XSLT.
- Identify how XML and associated technologies work together in dynamic web pages with server side or client side scripting.

Course Details

- Length: 8 hours
- Format: Classroom
- Prerequisites: HTML: Level 1 and 2 and Cascading Style Sheets: Level 1 or equivalent

The above prerequisites are considered to be the basic skills and knowledge needed prior to taking this class. Instructors will assume your readiness for the class materials and will NOT use class time to discuss prerequisite materials.

Course Contents

Create a well formed XML document to store data.

- Define the parts of a document, including declaration, prolog, and data elements.
- Describe the proper syntax of elements, attributes, and entities.

Create valid XML data formats and types using namespaces, document type definitions (DTDs), and Schemas.

- Declare elements and their content models using DTD.
- Use namespaces to create unique elements.
- Specify data types and formats using an XML Schema.
- Validate your XML data using an XML processor.

Apply CSS to an XML document to format the data being presented.

- Link an XML file to an internal or external CSS file.
- Create a stylesheet that applies styles to the XML elements.

Transform an XML document into another file type using XSLT.

- Create an HTML document from XML using XSLT.
- Use XPath to extract distinct nodes from XML within XSLT.

Identify how XML and associated technologies work together in dynamic web pages with server side or client side scripting.

- Use JavaScript to retrieve and display XML data on a webpage.
- Use PHP function or ASP function to retrieve and display XML data on a webpage.