WEBD341

Course Summary

Description

Course Description: This course is a study of the concepts and applications of the Extensible Markup Language (XML), a general-purpose markup language that can be used to formally specify special-purpose markup languages. This course will be taught from a mixture of analytical and practical methods. Topics include: the history of XML, the XML language, Data Type Definition (DTD), XML Schema, eXtensible Style Sheet Language (XSL), and eXtensible Style Sheet Language Transformations (XSLT). The student will bind values to elements to render them distinct and different from its other instances of that attribute and explore the power of XML as a tool for Enterprise Exchange in both the J2EE and .NET Software Development Frameworks. Knowledge of XML will enable the student to standardize and reuse reference text, paragraphs, and chapters.

Course Scope:

This course is a study of the concepts and applications of Extensible Markup Language (XML), which enables students to define their own "tags." Course topics include the differences between XML and HTML. Students will learn the XML syntax, to include Data Type Definition (DTD), which will enable students to specify all the structural elements of an XML document. They will learn the Attributes to bind a value to an element so it is distinct and different from other instances of that element. Knowledge of XML will enable the student to standardize and reuse and reference text, paragraphs, and chapters.

Objectives

The successful student will fulfill the following learning objectives:

1. Describe the power and advantages of XML that have made it the global standard for enterprise data exchange.
2. Modify XML document.
3. Demonstrate use of XML by adding and modifying declarations.
4. Summarize the need, the principles, and the power of XSL and XSLT to create new content, manage site layout, extract information, and for document format conversion.
5. Explain the advantages of using XQuery vs. using SQL in querying XML data.
6. Apply the process for creating XML documents and developing XML and DTD documents.
7. Analyze the ability of XML to facilitate inter-application and inter-tier communications.

Outline

Week 1:

Topics

Introduction to XML

Learning Objectives

Describe the power and advantages of XML that have made it the global standard for enterprise data exchange.

Readings

Ch 1, 2 &3

Assignments

Week1/Forum Introduction

Week 2:

Topics

Validation

Learning Objectives

- Modify XML document.

Readings

Ch 4, 5&6

Assignments

Week 2 Forum
Week 2 Assignment

Week 3:

Topics

Processing

Learning Objectives

- Demonstrate use of XML by adding and modifying declarations.

Readings

Ch 7

Assignments

Week 3 Forum
Week 3 Assignment

Week 4:

Topics

Processing

Learning Objectives

- Summarize the need, the principles, and the power of XSL and XSLT to create new content, manage site layout, extract information, and for document format conversion.

Readings

Ch 8

Assignments

Midterm Exam

Week 4 Forum

Week 4 Assignment

Week 5:

Topics

Databases

Learning Objectives

- Explain the advantages of using XQuery vs. using SQL in querying XML data.

Readings

Ch 9 & 10

Assignments

Week 5 Forum

Week 6:

Topics

Programming

Learning Objectives

- Apply the process for creating XML documents and developing XML and DTD documents.
- Analyze the ability of XML to facilitate inter-application and inter-tier communications.

Readings

Ch 11 & 12

Assignments

Week 6 Forum
Week 6 Assignment

Online Quiz

Week 7:

Topics

Communication

Learning Objectives

- Describe the power and advantages of XML that have made it the global standard for enterprise data exchange.

Readings

Ch 13, 14, 15 &16

Assignments

Week 7 Forum

Week 8:

Topics

Display

Learning Objectives

- Analyze the ability of XML to facilitate inter-application and inter-tier communications.

Readings

Ch 17, 18, 19

Assignments

Final Project/Assignment

Week 8 Forum

Evaluation

Students are expected to maintain routine contact with the instructor throughout the course. While the number of contacts may vary according to the specific course and individual student need, the University requires periodic weekly contacts during the semester. Contact will consist of professor notes, forum interaction, and email feedback. The method of discussion will be on-line related to issues concerning forum assignments, lesson assignments, and the final project.

TEXTBOOK READINGS
The main book for the course, Beginning Programming for Dummies, will be used for textbook readings.

Review the table at the end of the syllabus to see assigned readings for each week.

FORUM

The Forum assignments for this course are designed to promote interactivity among students and enhance the online learning process. The Forum provides maximum flexibility because you do not have to be online at the same time as another person and you can read what other students have written.

Forum Timing: For the forum, you must post your work by midnight on **Thursday (except for week one 'on Sunday')**, continue to follow your classmates' posts for the remainder of the week, and post the follow-up peer responses prior to midnight on **Sunday**. Your follow-up posts can add additional insight to a classmate's opinions or can challenge their opinions. Use examples from the readings, or from your own research, to support your views, as appropriate. Be sure to read the follow-up posts to your own posts and reply to any questions or requests for clarification. You are encouraged to conduct research and use other sources to support your answers.

Required Participation: Please keep in mind that the forum assignments require you to make at least 1 post to the forum with at least 250 words about the topic and also respond to at least 2 peers' posts with at least 150 words. Please be advised that there will be point deductions if you do not comply with these requirements of the assignment. Each one of you will have a different and unique experience that we can all learn from. Your participation in the Forums unleashes the power of synergy in our classroom. To facilitate this interaction, please be prompt when posting your forum work for each week; this provides time for the others to actively engage in the dialogue. For practical reasons, when you respond to other learners' posts, please start your response by referencing their name. I will read and grade your participation by reading the forum. There is no need to also post your forum work in the assignments area of the classroom. Refer to the forum and the syllabus for more details on grading.

WEEKLY ASSIGNMENTS

There will be weekly assignments for this course to reinforce your reading and learning. Students will use Python 3.x to practice programming concepts. Complete the weekly exercises required as stated in the Assignments area; then submit your work in the assignments area of the classroom as required.

FINAL GRADE IS BASED UPON: All work will be graded on a 100-point raw score basis. There are a total of 100 weighted points for this course broken down as follows:

Materials

Book Title: Beginning XML, 5th ed- E-book available in the APUS Online Library

Author: Hunter / Rafter / Fawcett / van der Vlist / Ayers / Duckett / Watt

Publication Info: Wiley Lib

ISBN: 9781118162132

Book Title: To find the library e-book(s) req'd for your course, please visit http://apus.libguides.com/er.php to locate the eReserve by course #. You must be logged in to eCampus first to access the links.

Author: N/A

Publication Info: N/A

ISBN: N/A

Course Guidelines

Citation and Reference Style

- Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

Tutoring

- Tutor.com offers online homework help and learning resources by connecting students to certified tutors for one-on-one help. AMU and APU students are eligible for 10 free hours* of tutoring provided by APUS. Tutors are available 24/7 unless otherwise noted. Tutor.com also has a SkillCenter Resource Library offering educational resources, worksheets, videos, websites and career help. Accessing these resources does not count against tutoring hours and is also available 24/7. Please visit the APUS Library and search for 'Tutor' to create an account.

Late Assignments

- Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. The due date for each assignment is listed under each Assignment.
- Generally speaking, late work may result in a deduction up to 20% of the grade for each day late, not to exceed 5 days.
- As a working adult I know your time is limited and often out of your control. Faculty may be more flexible if they know ahead of time of any potential late assignments.

Turn It In

- Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

Academic Dishonesty

- Academic Dishonesty incorporates more than plagiarism, which is using the work of others without citation. Academic dishonesty includes any use of content purchased or retrieved from web services such as CourseHero.com. Additionally, allowing your work to be placed on such web services is academic dishonesty, as it is enabling the dishonesty of others. The copy and pasting of content from any web page, without citation as a direct quote, is academic dishonesty. When in doubt, do not copy/paste, and always cite.

Submission Guidelines

- Some assignments may have very specific requirements for formatting (such as font, margins, etc) and submission file type (such as .docx, .pdf, etc) See the assignment instructions for details. In general, standard file types such as those associated with Microsoft Office are preferred, unless otherwise specified.

Disclaimer Statement

- Course content may vary from the outline to meet the needs of this particular group.

Communicating on the Forum

- Forums are the heart of the interaction in this course. The more engaged and lively the exchanges, the more interesting and fun the course will be. Only substantive comments will receive credit. Although there is a final posting time after which the instructor will grade comments, it is not sufficient to wait until the last day to contribute your comments/questions on the forum. The purpose of the forums is to actively participate in an on-going discussion about the assigned content.
- "Substantive" means comments that contribute something new and hopefully important to the discussion. Thus a message that simply says "I agree" is not substantive. A substantive comment contributes a new idea or perspective, a good follow-up question to a point made, offers a response to a question, provides an example or

illustration of a key point, points out an inconsistency in an argument, etc.

- As a class, if we run into conflicting view points, we must respect each individual's own opinion. Hateful and hurtful comments towards other individuals, students, groups, peoples, and/or societies will not be tolerated.

University Policies

Student Handbook

- Drop/Withdrawal policy
- Extension Requests
- Academic Probation
- Appeals
- Disability Accommodations

The mission of American Public University System is to provide high quality higher education with emphasis on educating the nation's military and public service communities by offering respected, relevant, accessible, affordable, and student-focused online programs that prepare students for service and leadership in a diverse, global society.