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Course Website: http://blackboard.uncg.edu  
Office Hours: Mondays and Wednesdays 5 to 6 pm and by appointment  

Textbook (Required) : XML in a Nutshell  
By E. Harold and W. Means  
Publisher: O'Reilley  
Year: 2004  
3rd Edition  
ISBN: 0-596-00764-7  
Note: Additional Handouts will be distributed to the students.  

Introduction  
This course will provide students with a fundamental and basic introduction to Extensible Markup Language (XML) and related set of technologies such as Extensible Stylesheet Language (XSL), Xpath, Xlinks and XPointers. It will additionally provide introductory coverage of the Data-Centric approach to using XML involving the Document Object Model (DOM) and the Simple API for XML (SAX).  
Recent developments in the Computing Industry related to Wireless Technologies, in general, and XML and WAP (Wireless Application Protocol), in particular, require that students be exposed to these related developments as well. Additionally, businesses are moving towards deploying Wireless Technologies that allow executives, employees, customers and suppliers access to varieties of information including access to backend databases using handheld devices such as Cell Phones, PDAs, Laptops, Notebooks etc. This is what I call movement towards "location independent" information access. Hence, this course will also provide an introduction to application development that falls in the realm of Mobile Ecommerce or M-Commerce using BASIC XHTML which is a closely related technology derived and based upon XML.
We will also cover software, hardware and network architectures to obtain a comprehensive understanding of the different pieces of technology that are needed to deploy E-Business and M-Commerce solutions.

Course Objectives:

After completion of the course, you will have gained conceptual and/or hands-on experience in developing XML applications using the following emerging technologies:

1) XML
2) DTD
3) XSLT and XPATH
4) XML Schema
5) XML Namespace
6) BASIC XHTML
7) Mobile Application Development and Testing
8) Oracle XSQL Pages
9) XML-Databases and Oracle XML DB
10) Overview of SOAP and Web Services Architecture

Student Requirements

As you can see, this course deals with significant amount of concepts and technologies that are new and mostly emerging. Hence, this will be a very demanding course. I suggest that you set aside at least 2 to 3 hours of study time for each class meeting. You should also be prepared to learn how to install, configure, test and use different pieces of software technologies that we will need in this course during this semester. It is expected that students be prepared to cope with the demanding and often frustrating elements of dealing with emerging technologies.

Programming Language Requirements

It is not a requirement but strongly desirable that students have the VB .Net or Java programming language background. As we will find out in the course of the semester that many of the developments around XML are taking place in the Java and the .Net Community. The reason for this is fairly simple: Java provides portable code and XML provides portable data independent of underlying computing platform.

Of course Microsoft and the Windows platform will continue to play a significant role in the current and future developments of XML and related technologies. This is evident in the .Net and the Biztalk Server initiative out of Microsoft.

From my perspective both streams of technologies are complementary and will play a significant role in the development of novel business solutions using cutting edge information technology. Additionally, the concepts we will cover are mostly usable in
either environment as we will be covering standards recommended or supported by the W3C (www.w3c.org).

**Instructional Methods:** The course is delivered through a mixture of readings, lectures, in-class exercises, assignments and group projects. Most in-class delivery will consist of the presentation and explanation of concepts and the consideration of examples. In-class quizzes may be held.

**Tests and Quizzes:** The course will include one in-class examination (mid-term) and a Final Exam. Quizzes normally take 5 - 10 minutes to complete and may be given at the start of class. Attendance at quizzes and examinations is mandatory -- **no make-up examinations or quizzes are given for any reason** (except for verifiable medical circumstances with prior notification).

**Attendance Policy:** Each student is responsible for all of the information (including announcements, handouts, etc.) presented in class. Your work in the ISOM program is designed to prepare you to function as a professional -- professionals show up for scheduled meetings prepared and on time. **Any person missing the first two classes without providing prior notification to the instructor will be administratively dropped from the course.** Any student missing more than three classes during the semester can expect to have his/her final grade lowered by as much as one letter grade. **No work-related excuses will be accepted.**

Each student is expected to come to class on time. If you are late, you disrupt me and the class and you are unable to follow the lecture and the discussion. You eventually lose interest in the course as it becomes more and more difficult for you. Hence, be present in the class on time. **No admittance to class 10 minutes past the start of classes.**

**Oral and Written Communication Content:** This course concentrates on the detailed understanding and discussion of XML related technologies. There will be significant attention given to oral and written communications. Students are expected to come to class prepared to ask questions and to (attempt to) answer questions posed to them. **Students are expected to communicate with the instructor primarily via email when necessary.**

**Technology Applications** Technological advances in computing are addressed throughout the course.

**Ethical Perspectives:** This course will address ethical perspectives in the context of the set of XML related technologies as they relate to a business environment.
Global Perspectives: This course will address global perspectives only in the context of technology, its impact and management.

Demographic Diversity Perspectives: This course will not specifically address the issues of demographic diversity.

Political, Social, Legal, Regulatory, and Environmental Perspectives: This course will not specifically address the perspectives of Political, Social, Legal, Regulatory, and Environmental issues except those that are relevant to the use of XML and related technologies.

Honor Code Policies: University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, forgery, and/or plagiarism. Students will NOT make, borrow, or “share” copies of their project assignments or files with other students. Plagiarism is defined as presenting as one’s own work that work which is, in whole or in part, the work of another person or persons without giving proper credit to the appropriate source (this includes any published material available on the Internet). This includes submitting work done by another as one’s own work. Helping one another is allowed, but copying is cheating. This practice violates the UNCG Honor Code and defeats the purpose of this course. No credit will be received for shared work, and other penalties may be imposed. Please refer to the UNCG Honor Code Policies.

Inclement Weather: Rarely UNCG closes for inclement weather. Local radio and television stations should have closing information by 6:30 a.m. Students may also call 334-5000 for any messages related to weather closings. Do NOT call the ISOM Department.

Posting Grades: Grades for courses offered in the ISOM Department are not posted and are not supplied over the telephone. If you wish "advance" information regarding a final grade, you should supply your instructor with a stamped, self-addressed envelop.
**Grading:** Grades for the course are based on examinations, quizzes, assignments, and attendance (and the instructor's subjective evaluation). The final grade for the course will be determined as follows:

*Note: Details about the Projects and Assignments will be given in time.*

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<thead>
<tr>
<th>Assignments</th>
<th>(Individual)</th>
<th>300 points (30%) of course grade</th>
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<tbody>
<tr>
<td>Group Project I</td>
<td>EBusiness Solution</td>
<td>300 points (30%) of course grade</td>
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<tr>
<td>Mid Term Exam</td>
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<td>200 points (20%) of course grade</td>
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<tr>
<td>Final Exam</td>
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<td>200 points (20%) of course grade</td>
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The relationship between total points and letter grades is as follows:

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</tr>
<tr>
<td>90 &lt;= X &lt; 94</td>
<td>A-</td>
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<tr>
<td>87 &lt;= X &lt; 90</td>
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