FIT3044
Advanced website authoring

Unit guide

Semester 1, 2009
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FIT3044 Advanced website authoring - Semester 1, 2009

Unit leader:

Lindsay Smith

Lecturer(s):

Berwick

- Lindsay Smith

Introduction

Welcome to FIT3044 Advanced Website Authoring for semester 1, 2009. This is a third level unit within the Bachelor of Information Technology and Systems, Multimedia major - the unit is designed to continue your development of web authoring skills by addressing more advanced techniques. This unit examines the more advanced XML based techniques which are used to author/publish rich media presentations on the web.

Unit synopsis

This unit extends the website authoring concepts taught in FIT1012 by looking at more advanced techniques which are available to web site developers in publishing rich media/multimedia content. The structure of an XML document is investigated and the manner in which such a document can be converted to HTML or other formats. Synchronized Multimedia Integration Language (SMIL), a form of XML, will be investigated as a technique for authoring interactive audiovisual presentations. In addition the unit introduces Adobe Flex as development platform for creating Rich Internet Applications.

Learning outcomes

Knowledge and Understanding

At the completion of this unit students will have a theoretical and conceptual understanding of:

- the fundamental elements of an XML document's structure and the processes involved in reading and handling such a document;
- the features and applicability of a range of software tools which are used in the development of websites;
- the advantages and limitations of XML in comparison to other formats such as HTML, EDI, Flat files etc;
- the role of the XML Schema Definition Language and its relationship to Document Type Definitions (DTDs);
- the role of XML Stylesheet Language (XSL) in document publishing;

Attitudes, Values and Beliefs

At the completion of this unit students will have developed attitudes that enable them to:

- adopt a flexible approach towards application development by consideration of the wide range of XML approaches available;
- appreciate the importance of systematic and structured approaches to program development.
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- appreciate the flexibility required in dealing with clients in a variety of situations encountered in the tendering/authoring process

Practical Skills

At the completion of this unit students will have the skills to:

- create an XML document and its associated Document Type Definition (DTD);
- create an XSL style sheet and use it to convert XML into HTML or other XML formats;
- make use of Cascading Style Sheets (CSS) to add style to web documents;
- be able to create an XML document and its associated Document Type Definition (DTD);
- be able to create an XSL style sheet and use it to convert XML into HTML or other XML formats;
- write Adobe Flex applications to produce RIA dynamic database driven web documents and produce design specification documents applicable to a web site authoring task.

Relationships, Communication and TeamWork

At the completion of this unit students will have further developed the teamwork skills needed to:

- work as a member of a project team.

Workload

For on campus students, the weekly workload commitments are:

- two hours of lectures,
- two hours of laboratory (requiring advance preparation), and
- eight hours of self directed study - this will include reading and computer based activities.

Unit relationships

Prerequisites

FIT3044 Advanced Website Authoring requires that you have already completed FIT1012 Website Authoring (or an approved equivalent). This prerequisite is necessary in order to provide a basic knowledge of web programming and coding constructs which will be used within this unit.

Relationships

FIT3044 is a unit in the Multimedia major of the Bachelor of Information Technology and Systems. Before attempting this unit you must have satisfactorily completed FIT1012 Website Authoring (or an approved equivalent). You may not study this unit and GCO2811, GCO3823, CPE3002, CSE2030 or MMS2802 in your degree. Having completed FIT3044 you will be able to apply this material to your studio projects.

Continuous improvement

Monash is committed to ‘Excellence in education’ (Monash Directions 2025 - http://www.monash.edu.au/about/monash-directions/directions.html) and strives for the highest possible quality in teaching and learning.

To monitor how successful we are in providing quality teaching and learning Monash regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through Unit Learning outcomes
Evaluation Surveys. The University’s Unit Evaluation policy (http://www.policy.monash.edu/policy-bank/academic/education/quality/unit-evaluation-policy.html) requires that every unit offered is evaluated each year. Students are strongly encouraged to complete the surveys as they are an important avenue for students to “have their say”. The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

Faculties have the option of administering the Unit Evaluation survey online through the my.monash portal or in class. Lecturers will inform students of the method being used for this unit towards the end of the semester.

Student Evaluations

If you wish to view how previous students rated this unit, please go to http://www.adm.monash.edu.au/cheq/evaluations/unit-evaluations/

Improvements to this unit

Following feedback from semester 1 2008, the application of XML to the creation of Adobe Flex RIA’s has been extended.

Unit staff - contact details

Unit leader

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Deputy Head of School
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Fax +61 3 990 47089

Lecturer(s) :

Mr Lindsay Smith
Deputy Head of School
Phone +61 3 990 47201
Fax +61 3 990 47089

Teaching and learning method

The unit will be delivered via lectures and laboratories.

Lecture: During the lecture, your lecturer will introduce key theoretical concepts and demonstrate various approaches to web authoring tasks. The time in lectures is quite brief, please ensure you gain the best advantage from this time by:

- Prior to the lecture
  - downloading and reading the lecture notes,
- During the lecture
  - annotate a printed set of lecture notes as the lecture proceeds, and
  - participate, question, seek clarification
- After the lecture
  - read over your notes and make sure you understand the concepts
  - seek help if you are unsure
The labs consist of a set of graded exercises which allow you to put the theory presented in the lecture to work in authoring web site content. The labs will also include issues that you will need to discuss with your fellow classmates and tutors. Before the lab you should carefully read through the lab activities. The teaching staff will presume that you have completed all the posted lab tasks each week and build subsequent activities on this assumption. For this reason it is very important that you complete all the posted tasks (please note you will not be able to complete them in the allocated 2 hours, these will be completed in your self study 8 hours). Given the cumulative nature of the learning, it is easy to fall behind if either you do not complete the required work or fail to understand key tasks/concepts. If you are having problems with lab exercises, please ensure you speak to your tutor and gain some assistance.

**Tutorial allocation**

On-campus students should register for laboratories using Allocate+.

**Communication, participation and feedback**

Monash aims to provide a learning environment in which students receive a range of ongoing feedback throughout their studies. You will receive feedback on your work and progress in this unit. This may take the form of group feedback, individual feedback, peer feedback, self-comparison, verbal and written feedback, discussions (on line and in class) as well as more formal feedback related to assignment marks and grades. You are encouraged to draw on a variety of feedback to enhance your learning.

It is essential that you take action immediately if you realise that you have a problem that is affecting your study. Semesters are short, so we can help you best if you let us know as soon as problems arise. Regardless of whether the problem is related directly to your progress in the unit, if it is likely to interfere with your progress you should discuss it with your lecturer or a Community Service counsellor as soon as possible.

**Unit Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Key dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fundamentals of XML</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Document Type Definitions (DTDs)</td>
<td></td>
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<tr>
<td>3</td>
<td>XML Namespaces</td>
<td></td>
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<tr>
<td>4</td>
<td>XML Schemas</td>
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<tr>
<td>5</td>
<td>Formatting XML for the web with CSS</td>
<td></td>
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<tr>
<td>6</td>
<td>Transforming XML via eXtensible Stylesheet Language (XSL)</td>
<td></td>
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<tr>
<td></td>
<td>Mid semester break</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>XML applications: SMIL, SVG, DocBook, XHTML, WAP and SOAP</td>
<td>Assignment 1 Due</td>
</tr>
<tr>
<td>8</td>
<td>Rich Internet Applications (RIAs) - Flex and MXML introduction</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Flex and Actionscript</td>
<td></td>
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<tr>
<td>10</td>
<td>Containers, Events and Components</td>
<td></td>
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<tr>
<td>11</td>
<td>Flex and Coldfusion</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Flex and CSS</td>
<td>Assignment 2 Due</td>
</tr>
<tr>
<td>13</td>
<td>Revision</td>
<td></td>
</tr>
</tbody>
</table>
Unit Resources

Prescribed text(s) and readings


Recommended text(s) and readings

Details available from the Unit website

Required software and/or hardware

The software required will be available in the university on-campus labs. Some items of software will be available from MUSO for student download.

The unit will make extensive use of the oXygen XML Editor:

- http://www.oxygenxml.com/

and Adobe Flex 3 available from:


Equipment and consumables required or provided

Students may use the facilities available in the computing labs. Information about computer use for students is available from the ITS Student Resource Guide in the Monash University Handbook. You will need to allocate up to 8 hours per week for use of a computer.

Study resources

Study resources we will provide for your study are:

- Weekly detailed lecture notes outlining the learning objectives, discussion of the content, required readings and exercises;
- Weekly laboratory tasks and exercises with sample solutions provided two weeks later;
- Assignment specifications and sample solutions;
- A sample examination and suggested solution
- Access to past examination papers;
- Discussion groups;
- This Unit Guide outlining the administrative information for the unit;
- The unit web site on Moodle, where resources outlined above will be made available.

Library access

The Monash University Library site contains details about borrowing rights and catalogue searching. To learn more about the library and the various resources available, please go to [http://www.lib.monash.edu.au](http://www.lib.monash.edu.au).

The Educational Library and Media Resources (LMR) is also a very resourceful place to visit at
Monash University Studies Online (MUSO)

All unit and lecture materials are available through MUSO (Monash University Studies Online). Blackboard is the primary application used to deliver your unit resources. Some units will be piloted in Moodle. If your unit is piloted in Moodle, you will see a link from your Blackboard unit to Moodle (http://moodle.monash.edu.au) and can bookmark this link to access directly. In Moodle, from the Faculty of Information Technology category, click on the link for your unit.

You can access MUSO and Blackboard via the portal: http://my.monash.edu.au

Click on the Study and enrolment tab, then Blackboard under the MUSO learning systems.

In order for your Blackboard unit(s) to function correctly, your computer needs to be correctly configured.

For example:

- Blackboard supported browser
- Supported Java runtime environment

For more information, please visit: http://www.monash.edu.au/muso/support/students/downloadables-student.html

You can contact the MUSO Support by phone: (+61 3) 9903 1268

For further contact information including operational hours, please visit: http://www.monash.edu.au/muso/support/students/contact.html

Further information can be obtained from the MUSO support site: http://www.monash.edu.au/muso/support/index.html

Assessment

Unit assessment policy

To be eligible to sit for the examination at the end of the semester you must attend 80% of your tutorials. If you are absent for more than two tutorials you must supply a medical certificate or other appropriate documentation otherwise you will be excluded from the examination. If you are finding problems with this requirement please ensure you speak to your chief examiner as early as possible.

To pass this unit you must obtain:

1. 40% or more in the unit's examination component
   and
2. 40% or more in the unit's total non-examination assessment
   and
3. an overall unit mark of 50% or more

If a student does not achieve 40% or more in the unit examination or the unit non-examination total assessment, and the total mark for the unit is greater than 44% then a mark of 44-N will be recorded for the unit.
Assignment tasks

- **Assignment Task**

  **Title**: Assignment 1 Creation and Manipulation of Static XML documents

  **Description**:

  **Weighting**: 20%

  **Criteria for assessment**:

  These will be supplied as part of the assignment task.

  **Due date**: Thursday 23rd April 2009

- **Assignment Task**

  **Title**: Assignment 2 Database-linked website using Adobe FLEX

  **Description**:

  **Weighting**: 20%

  **Criteria for assessment**:

  These will be supplied as part of the assignment task.

  **Due date**: Thursday 28th May 2009

Examinations

- **Examination 1**

  **Weighting**: 20%

  **Length**: 1 hour

  **Type (open/closed book)**: Closed book

  **Remarks (optional - leave blank for none)**:

  Theory examination

- **Examination 2**

  **Weighting**: 40%

  **Length**: 3 hours

  **Type (open/closed book)**: Open book

  **Remarks (optional - leave blank for none)**:

  Practical Examination
Assignment submission

Refer to the FIT3044 Moodle Unit site for assignment submission details.

Assignment coversheets

Assignment coversheets are available as follows:

- for hard copy submissions - via the "Student assignment coversheets" page on the faculty website
- for Moodle online based submissions - coversheets will be provided electronically on the Moodle system

University and Faculty policy on assessment

Due dates and extensions

The due dates for the submission of assignments are given in the previous section. Please make every effort to submit work by the due dates. It is your responsibility to structure your study program around assignment deadlines, family, work and other commitments. Factors such as normal work pressures, vacations, etc. are seldom regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

Requests for extensions must be made to the unit lecturer at your campus at least two days before the due date. You will be asked to forward original medical certificates in cases of illness, and may be asked to provide other forms of documentation where necessary. A copy of the email or other written communication of an extension must be attached to the assignment submission.

Late assignment

Assignments received after the due date will be subject to a penalty of 5% per day including weekends. Assignments received later than one week (seven days) after the due date will not normally be accepted.

The only exception to this is in the case of illness or other serious cause. In any such cases, proper third party documentation (e.g. a doctor's certificate) will have to be supplied.

Return dates

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.

Assessment for the unit as a whole is in accordance with the provisions of the Monash University Education Policy at http://www.policy.monash.edu/policy-bank/academic/education/assessment/

Plagiarism, cheating and collusion

Plagiarism and cheating are regarded as very serious offences. In cases where cheating has been confirmed, students have been severely penalised, from losing all marks for an assignment, to facing disciplinary action at the Faculty level. While we would wish that all our students adhere to sound ethical conduct and honesty, I will ask you to acquaint yourself with Student Rights and Responsibilities (http://www.infotech.monash.edu.au/about/committees-groups/facboard/policies/studrights.html) and the Faculty
regulations that apply to students detected cheating as these will be applied in all detected cases.

In this University, cheating means seeking to obtain an unfair advantage in any examination or any other written or practical work to be submitted or completed by a student for assessment. It includes the use, or attempted use, of any means to gain an unfair advantage for any assessable work in the unit, where the means is contrary to the instructions for such work.

When you submit an individual assessment item, such as a program, a report, an essay, assignment or other piece of work, under your name you are understood to be stating that this is your own work. If a submission is identical with, or similar to, someone else's work, an assumption of cheating may arise. If you are planning on working with another student, it is acceptable to undertake research together, and discuss problems, but it is not acceptable to jointly develop or share solutions unless this is specified by your lecturer.

Intentionally providing students with your solutions to assignments is classified as "assisting to cheat" and students who do this may be subject to disciplinary action. You should take reasonable care that your solution is not accidentally or deliberately obtained by other students. For example, do not leave copies of your work in progress on the hard drives of shared computers, and do not show your work to other students. If you believe this may have happened, please be sure to contact your lecturer as soon as possible.

Cheating also includes taking into an examination any material contrary to the regulations, including any bilingual dictionary, whether or not with the intention of using it to obtain an advantage.

Plagiarism involves the false representation of another person's ideas, or findings, as your own by either copying material or paraphrasing without citing sources. It is both professional and ethical to reference clearly the ideas and information that you have used from another writer. If the source is not identified, then you have plagiarised work of the other author. Plagiarism is a form of dishonesty that is insulting to the reader and grossly unfair to your student colleagues.

Register of counselling about plagiarism

The university requires faculties to keep a simple and confidential register to record counselling to students about plagiarism (e.g. warnings). The register is accessible to Associate Deans Teaching (or nominees) and, where requested, students concerned have access to their own details in the register. The register is to serve as a record of counselling about the nature of plagiarism, not as a record of allegations; and no provision of appeals in relation to the register is necessary or applicable.

Non-discriminatory language

The Faculty of Information Technology is committed to the use of non-discriminatory language in all forms of communication. Discriminatory language is that which refers in abusive terms to gender, race, age, sexual orientation, citizenship or nationality, ethnic or language background, physical or mental ability, or political or religious views, or which stereotypes groups in an adverse manner. This is not meant to preclude or inhibit legitimate academic debate on any issue; however, the language used in such debate should be non-discriminatory and sensitive to these matters. It is important to avoid the use of discriminatory language in your communications and written work. The most common form of discriminatory language in academic work tends to be in the area of gender inclusiveness. You are, therefore, requested to check for this and to ensure your work and communications are non-discriminatory in all respects.

Students with disabilities

Students with disabilities that may disadvantage them in assessment should seek advice from one of the following before completing assessment tasks and examinations:
Deferred assessment and special consideration

Deferred assessment (not to be confused with an extension for submission of an assignment) may be granted in cases of extenuating personal circumstances such as serious personal illness or bereavement. Information and forms for Special Consideration and deferred assessment applications are available at http://www.monash.edu.au/exams/special-consideration.html. Contact the Faculty's Student Services staff at your campus for further information and advice.