

ITNP13

Web Scripting using XML and PHP

Lecturers

Dr Mario Kolberg (coordinator), Room 4B60, email mko@cs.stir.ac.uk

Kevin Swingler, Room 4B54, email kms@cs.stir.ac.uk

Jesse Blum, Room 4B88, email jmb@cs.stir.ac.uk

Prerequisites

None

Learning Outcomes

- An understanding of the significance of XML for data transfer
- Familiarity with the basic structure of XML documents and DTDs
- Understanding of XML-related technologies such as XSLT and XPath
- Understanding of web scripting approaches, with special reference to the World Wide Web
- Ability to create web pages dynamically with server side PHP scripts accessing databases
- Experience with PHP programming for XML

Transferable Skills

- Ability to use XML to design portable data formats
- Ability to critically analyse and evaluate Web applications
- Understanding and experience of scripting

Contents

XML

- Motivation
- General Structure
- DTDs (and Schemas); namespaces
- Parsing (SAX and DOM)
- XSLT and XPath
- Presentation-oriented transformations (CSS, XSL-FO)
- Other Applications (DocBook, SVG, Web Publishing)

Web Scripting

- PHP: data structures, conditions and loop constructs, built-in and user-defined functions
- Server-side Web scripting using PHP
- Database access from PHP
- Introduction to XML processing using PHP

Textbooks

- Elliotte Rusty Harold and W. Scott Means, *XML in a Nutshell*, 3rd edition, O'Reilly, 2004
- *Programming PHP*, R. Lerdorf, K. Tatroe, O'Reilly (2002), ISBN: 1-56592-610-2.
- *Webmaster in A Nutshell*, S. Spainhour and B. Eckstein, O'Reilly Associates, 3rd edition (2003), ISBN 0596003579.

ITNP13 Web Scripting using XML and PHP**Assessment**

XML assignment 20%, PHP assignment 30%, examination 50%. Coursework will be accepted up to five days after the submission date (or expiry of any agreed extension) but the grade will be lowered by one grade point per day or part thereof. After five days the piece of work will be deemed a non-submission and will receive an X (no grade), resulting in No Grade for the module overall.

If a student does not submit an item of course work, or does not attend the exam, they will receive 'no grade' for that component of assessment, again resulting in No Grade for the module overall. This rule may be relaxed for students who can show good cause for failure to submit an item of coursework. 'Good cause' may include illness (for which a medical certificate or other evidence will be required.) If you are unable to attend the exam, you should apply to the Student Programmes Office for a Deferred exam. Further information is available from the Student Programmes Office.

Lectures

The first lecture will be held on **Friday 18th September at 12noon in 2B87.**

Day	Time	Room
Monday	9am	LTA5
Monday	12noon	LTA1
Friday	12noon	2B87

Tutorials

The first tutorials will be in the week beginning **28th September**. Tutorials will take place on Mondays at 1pm in 2B84. A detailed plan will be made available at the first lecture.

Practicals

The first practicals will be held in the week beginning **21st September**. Practical will take place on Mondays at 3pm in 4X7. A detailed plan will be made available at the first lecture.

Day	Time	Room
Monday	3pm – 6pm	4X7

Assignments

There are two assignment, each worth 20% of the total course work. The details of the assignments will be announced later.

Assignment	Due Date
Assignment 1 PHP	Monday, 2 Nov 2009
Assignment 2 XML	Thursday, 26 Nov 2009