

# 可擴展標示語言之文件處理：理論與實務

## XML Document Processing: Theory and Practice

(Course Number: 725 U3420)

Fall 2008

### Place and Time

Room 309 in Common Courses Building, Wednesday 14:30 – 17:20.

### Course Web Site

<http://www.iis.sinica.edu.tw/~trc/public/courses/Fall12008/>

### Instructor

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### Teaching Assistant

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### Schedule

(Part 1) 09/17 Document markup languages; HTML and SVG examples; Why XML?

(Part 1) 09/24 XML Recommendation — DTD (Document Type Definition); Case study: RSS 0.91, QAML, XBEL.

(Part 1) 10/01 XML Recommendation — language code, character set, text encoding; XML Namespace.

(Part 1) 10/08 (Guest Lecturer: Yi-Hong Chang 張藝鴻) CSS (Cascading Style Sheets).

(Part 2) 10/15 XPath (XML Path Language).

(Part 2) 10/22 XSLT (Extensible Stylesheet Language Transformations).

(Part 2) 10/29 DOM (Document Object Model).

(Part 2) 11/05 XML in Web programming: Server-side/client-side XSLT, client-side ECMAScripting, etc.

(Part 3) 11/12 XML DTD revisited; Case study: Ruby, XBEL, XHTML Modulation.

(Part 3) 11/19 (Guest Lecturer: Chin-Lung Chang 張欽隆) XML Schema — Structures & Datatypes.

(Part 3) 11/26 Relax NG; Case study: Atom.

(Part 3) 12/03 Comparisons of XML schema languages; issues in XML document validation.

(Part 3) 12/10 RDF (Resource Description Framework).

(Part 4) 12/17 (*Project proposal due*) Balanced context-free grammars.

(Part 4) 12/24 Regular tree grammars; tree automata.

(Part 4) 12/31 Validated XML processors; Case study: CDuce.

(Part 4) 12/07 XML research topics.

(Part 5) 01/14 (*Project presentation*)

### Reference Book (Recommended)

Elliotte Rusty Harold & W. Scott Means. *XML in a Nutshell*, 3rd edition. Sept. 2004, O'Reilly Media, Inc.

### Grade

Homework (60%) and project (40%).