

Liverpool John Moores University

Title: FUNDAMENTALS OF XML TECHNOLOGIES
Status: Definitive
Code: **6502TCOM** (103352)
Version Start Date: 01-08-2011

Owning School/Faculty: Computing and Mathematical Sciences
Teaching School/Faculty: TMC Singapore

Team	Leader
Hulya Francis	Y

Academic Level: FHEQ6
Credit Value: 12.00
Total Delivered Hours: 36.00
Total Learning Hours: 120
Private Study: 84

Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	12.000
Practical	24.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Students will work individually to produce a module paper based on a set subject.	100.0	

Aims

1. To define and explain the range of inter-related XML technologies.
2. To introduce the purpose of XML technologies for creating information systems for organisations.
3. To define what Web Services Description Language is, and how to read a WSDL file in relation to XML technologies.

Learning Outcomes

After completing the module the student should be able to:

- 1 Use XML technologies to create information systems.
- 2 Apply and create an XML data schema, XML document and XML stylesheet.
- 3 Use a parser to parse an XML document and list its content.
- 4 Understand the concept of parsing XML files.
- 5 Use APIs for processing XML files.
- 6 Explain the 3-tier nature of web services, and what they can do.
- 7 Know what Web Services Description Language is and apply it.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Report	1	2	3	4	5	6	7
--------	---	---	---	---	---	---	---

Outline Syllabus

1. *Introduction to SGML, HTML, and XML.*
2. *Creating a markup document using an IDE such as NetBeans.*
3. *Creating an XML data schema.*
4. *Introduction to XML processing with SAX, DOM and XSLT.*
5. *Creating an XML document and an XML stylesheet.*
6. *XML Style Sheets.*
7. *Parsing an XML document and listing its contents.*
8. *Introducing Web Services Description Language, and how to read a WSDL file.*
9. *Generating WDSL descriptions from code.*
10. *Using WDSL to generate skeletons and stubs for distributed language-independent applications.*

Learning Activities

The learning approach adopted will be based on student-centred, problem-based experiential methods. Students will participate in interactive lectures/seminars and, lab sessions. They will work in teams in lab sessions to solve problems. They will also be expected to read about the subject paying special attention to the indicative references.

References

Course Material	Book
Author	Myers, T
Publishing Year	2002
Title	XML Programming
Subtitle	

Edition	
Publisher	APRESS
ISBN	

Course Material	Book
Author	Bradley, N
Publishing Year	1999
Title	The XML Companion
Subtitle	
Edition	
Publisher	ADDISON WESLEY
ISBN	

Course Material	Book
Author	Dietel, HM
Publishing Year	2001
Title	XML: How to Program
Subtitle	
Edition	
Publisher	PRENTICE HALL
ISBN	

Notes

This module focuses on introducing the fundamental concepts of XML technologies and demonstrates the linkages between the various technologies in the XML family. Students will learn how to use the range of XML technologies to develop information systems and web services.