MONASH University
Information Technology

FIT3021
Infrastructure for e-commerce

Unit Guide

Semester 1, 2010

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FIT3021 Infrastructure for e-commerce - Semester 1, 2010

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Introduction

Welcome to FIT3021 Infrastructure for Electronic Commerce for Semester 1, 2010.

Unit synopsis

This unit aims to develop and extend students understanding and knowledge about the information technology infrastructure that supports and enables modern electronic commerce systems. This infrastructure includes communication networks (wireline and wireless), the Internet, payment mechanisms, and a range of enabling technologies, such as XML, server technologies, software agents, various emerging protocols and standards. Applications and recent developments in such enabling technologies including mobile commerce are explored. The unit approaches some infrastructure issues from the perspective of security in electronic commerce, focussing on real and potential security problems and the techniques for addressing them. Privacy and legal issues concerning electronic commerce are discussed.

Learning outcomes

At the completion of this unit students will be able to:

- develop a comprehensive knowledge about global information infrastructure;
- understand the threats to electronic commerce on the Internet and potential security problems;
- understand the process for the design of secure systems;
- demonstrate the understanding and need for security protocols and procedures;
- understand the security issues and vulnerabilities of eCommerce servers and know the defensive strategies;
- be aware of the problems arising from active content technologies;
- be familiar with the XML standard and examine how it can be applied to develop ecommerce applications;
- be familiar with the mobile commerce technology and the services it offers.
- understand and evaluate electronic payment mechanisms;
- appreciate the privacy and legal issues and be familiar with anonymity technologies;
- understand the applicability of intelligent software agents in electronic commerce.Students will:
- appreciate the importance of a secure information infrastructure in conducting electronic commerce;
- appreciate the privacy and legal issues;
- grasp the ongoing development in emerging electronic commerce technologies including mobile commerce.Students will:
- develop skills in XML to produce small applications.

Contact hours

2 hrs lectures/wk, 2 hrs tutorials/wk

Workload

For on campus students, workload commitments are:

- two-hour lecture and
- two-hour tutorial

You will need to allocate up to 8 hours per week on average for personal study (study guide, textbook, lecture notes and tutorial), attending newsgroup discussion and working on assignments.

Unit relationships

Prerequisites

FIT2005 or GCO2852 or GCO9806 or BEG1601 or equivalent

Prohibitions

GCO3601

Teaching and learning method

Teaching approach

This unit will be delivered via 2-hour lecture and 2-hour tutorial. Lecturer will present theoretical concepts backed by specific examples through slides during lecture. The tutorials are designed for the students to clarify those concepts and understand industry practices and standards on security related issues.

Timetable information

For information on timetabling for on-campus classes please refer to MUTTS,
http://mutts.monash.edu.au/MUTTS/

Tutorial allocation

On-campus students should register for tutorials/laboratories using the Allocate+ system:
http://allocate.its.monash.edu.au/

Unit Schedule

Week	Date	Topic	Study guide	Key dates
1	01/03/10	Internet history and standards	SG 1	
2	08/03/10	Web Client / Server Infrastructure	SG 2	
3	15/03/10	Securing the Enterprise Infrastructure	SG 3	
4	22/03/10	Security Mechanisms: Authentication & Encryption	SG 4	
5	29/03/10	Security Policies and Protocols: Four Case Studies	SG 5	
Mid semester break				
6	12/04/10	Mobile Commerce	SG 6	April 12, 2009 (Assignment 1 due)
7	19/04/10	Enterprise Messaging and XML	SG 7	
8	26/04/10	XML: Developing E-Commerce Applications	SG 8	
9	03/05/10	Intelligent Agents	SG 9	
10	10/05/10	Web Services and the Semantic Web	SG 10	May 14, 2009 (Assignment 2 due)
11	17/05/10	Enterprise Networks: Acceptable Use	SG 11	
12	24/05/10	Intellectual property	SG 12	
13	31/05/10	Review		

Unit Resources

Prescribed text(s) and readings

Prescribed Text

Simson Garfinkel, Gene Spafford, and Debby Russell, "Web Security, Privacy and Commerce", O'Reilly & Associates, 2002.

Recommended text(s) and readings

Reference Texts

Michael P. Papazoglou and Pieter Ribbers, *e-Business*, 1st edition, John Wiley & Sons Ltd; 2006.

Michael J. Young, "XML step by step", 2nd edition, Microsoft Press, 2002.

Ford W. and Baum M.,"Secure Electronic Commerce", Prentice-Hall, 2001.

Ghosh, Anup K., "Electronic Commerce Security:- Weak Links, Best Defenses", John Wiley & Sons., 1998.

Carey K. and Blatnik S., "XML: Content and Data", 1st edition, Prentice Hall, 2002.

Required software and/or hardware

Public Domain software available to used in this unit. Software may be downloaded from http://www.xmlspy.com/download.html. Similar software is also available from other sources, please check unit website for update on this.

Equipment and consumables required or provided

Students studying off-campus are required to have the minimum system configuration specified by the faculty as a condition of accepting admission, and regular Internet access. On-campus students, and those studying at supported study locations 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 hours per week for use of a computer, including time for newsgroups/discussion groups.

Study resources

Study resources we will provide for your study are:

The following material will be available in **printed format**

- Reader containing selected articles and extracts (this articles are only for perusal to have an idea on electronic commerce)

The following course materials that will be provided in **on-line format** only in MUSO:

- Unit Information guide

- Unit Book divided into twelve study guides
- Lecture notes and tutorial materials on weekly basis
- Assignments
- Sample examination paper with sample solution
- Link to a range of references material on the World Wide Web

Assessment

Overview

Examination (3 hours): 50%; In-semester assessment: 50%

Faculty assessment policy

To pass a unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit's examination, and
- 40% or more in the unit's total non-examination assessment, and
- 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 50% then a mark of no greater than 49-N will be recorded for the unit.

To pass a unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit's examination and
- 40% or more in the unit's total non-examination assessment and
- 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 coversheets

Assignment coversheets are available via "Student Forms" on the Faculty website:
http://www.infotech.monash.edu.au/resources/student/forms/
You MUST submit a completed coversheet with all assignments, ensuring that the plagiarism declaration section is signed.

Assignment submission and return procedures, and assessment criteria will be specified with each assignment.

- **Assignment task 1**

  Title:
  A report on a selected infrastructure topic
  Description:
  Students will require to submit a research report of 2500-words long on a topic related to electronic commerce. Students can choose a topic out of the list given in assignment specification or propose a new topic. This assignment will test students' understanding of infrastructure need for electronic commerce.
  Weighting:
  30%
  Due date:

April 12, 2010

- **Assignment task 2**

Title:
An XML based application or design
Description:
Students will design an XML based application for electronic commerce.
Weighting:
20%
Due date:
May 14, 2010

Examination

- **Weighting:** 50%
  Length: 3 hours
  Type (open/closed book): Closed book

See Appendix for End of semester special consideration / deferred exams process.

Due dates and extensions

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 not regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

Students requesting an extension for any assessment during semester (eg. Assignments, tests or presentations) are required to submit a Special Consideration application form (in-semester exam/assessment task), along with original copies of supporting documentation, directly to their lecturer within two working days before the assessment submission deadline. Lecturers will provide specific outcomes directly to students via email within 2 working days. The lecturer reserves the right to refuse late applications.

A copy of the email or other written communication of an extension must be attached to the assignment submission.

Refer to the Faculty Special consideration webpage or further details and to access application forms: http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html

Late assignment

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.

Assignments submitted after the due date will be accepted only in exceptional circumstances. If an assignment will be late, it is necessary to contact the unit adviser of your campus at least 2 days before the due date. You may be required to provide documentation to support a request for late submission. There may be a penalty of 3% for each day of late submission if not approved before due date.

Return dates

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

Appendix

Please visit the following URL: http://www.infotech.monash.edu.au/units/appendix.html for further information about:

- Continuous improvement
- Unit evaluations
- Communication, participation and feedback
- Library access
- Monash University Studies Online (MUSO)
- Plagiarism, cheating and collusion
- Register of counselling about plagiarism
- Non-discriminatory language
- Students with disability
- End of semester special consideration / deferred exams