FIT3021
Infrastructure for e-commerce

Unit Guide

Semester 1, 2012

Last updated: 27 Feb 2012

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FIT3021 Infrastructure for e-commerce - Semester 1, 2012

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.

Mode of Delivery

- Gippsland (Day)
- Gippsland (Off-campus)
- South Africa (Day)

Contact Hours

2 hrs lectures/wk, 2 hrs tutorials/wk

Workload

Students will be expected to spend a total of 12 hours per week during semester on this unit.

For on campus students, workload commitments each week are:

- 2 hour lecture
- 2 hour tutorial

    You will need to allocate at least an extra 8 hours per week on average for personal study (reviewing the study guide, textbook, lecture notes and tutorials), attending newsgroup discussions and working on assignments.

Distance education students will have online access to all teaching materials from the unit website, and the same hourly commitments.

Unit Relationships

Prohibitions

GCO3601

Prerequisites

FIT2005 or GCO2852 or GCO9806 or BEG1601 or equivalent

Chief Examiner

Associate Professor Joarder Kamruzzaman

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Campus Lecturer

Gippsland

Gour Karmakar

South Africa

Tarirai Chani

Academic Overview

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.

Graduate Attributes

Monash prepares its graduates to be:

1. responsible and effective global citizens who:

a. engage in an internationalised world
b. exhibit cross-cultural competence
c. demonstrate ethical values

critical and creative scholars who:

a. produce innovative solutions to problems
b. apply research skills to a range of challenges
c. communicate perceptively and effectively

Assessment Summary

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

Assessment Task	Value	Due Date
Report on a selected infrastructure topic	30%	3 April 2012
XML based application or design	20%	15 May 2012
Examination 1	50%	To be advised

Teaching Approach

Lecture and tutorials or problem classes

This teaching and learning approach provides facilitated learning, practical exploration and peer learning.

Feedback

Our feedback to You

Types of feedback you can expect to receive in this unit are:

- Informal feedback on progress in labs/tutes
- Graded assignments with comments
- Solutions to tutes, labs and assignments

Your feedback to Us

Monash is committed to excellence in education and regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through SETU, Student Evaluation of Teacher and Unit. The University's student evaluation policy requires that every unit is evaluated each year. Students are strongly encouraged to complete the surveys. The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

For more information on Monash's educational strategy, and on student evaluations, see:
http://www.monash.edu.au/about/monash-directions/directions.html
http://www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html

Previous Student Evaluations of this unit

If you wish to view how previous students rated this unit, please go to
https://emuapps.monash.edu.au/unitevaluations/index.jsp

Required Resources

Please check with your lecturer before purchasing any Required Resources. Prescribed texts are available for you to borrow in the library, and prescribed software is available in student labs.

Public domain software is available for use in this unit. Software may be downloaded from http://www.xmlspy.com/download.html. Similar software is also available from other sources, please check the unit website for updates.

Prescribed text(s)

Prescribed texts are available for you to borrow in the library.

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

Unit Schedule

Week	Activities	Assessment
0		No formal assessment or activities are undertaken in week 0
1	Internet history and standards	
2	Web Client / Server Infrastructure	
3	Securing the Enterprise Infrastructure	
4	Security Mechanisms: Authentication & Encryption	
5	Security Policies and Protocols: Four Case Studies	
6	Mobile Commerce	Assignment 1 due 3 April 2012
7	Enterprise Messaging and XML	
8	XML: Developing E-Commerce Applications	
9	Intelligent Agents	
10	Web Services and the Semantic Web	
11	Enterprise Networks: Acceptable Use	Assignment 2 due 15 May 2012
12	Intellectual property	
	SWOT VAC	No formal assessment is undertaken SWOT VAC
	Examination period	LINK to Assessment Policy: http://policy.monash.edu.au/policy-bank/academic/education/assessment/assessment-in-coursework-policy.html

*Unit Schedule details will be maintained and communicated to you via your MUSO (Blackboard or Moodle) learning system.

Assessment Requirements

Assessment Policy

Faculty Policy - Unit Assessment Hurdles
(http://www.infotech.monash.edu.au/resources/staff/edgov/policies/assessment-examinations/unit-assessment-hu

Assessment Tasks

Participation

- **Assessment task 1**

  Title:
  > Report on a selected infrastructure topic

  Description:
  > Students will be required to submit a research report of 2500 words on a topic related to electronic commerce. Students can choose a topic out of the list given in the assignment specification or propose a new topic. This assignment will test students' understanding of infrastructure needs for electronic commerce.

  Weighting:
  > 30%

  Criteria for assessment:
  > Description of Technology Infrastructure, Understanding of Topic, Relevance to E-commerce, Future Impact/Significance, Presentation and Bibliography.

  Due date:
  > 3 April 2012

- **Assessment task 2**

  Title:
  > XML based application or design

  Description:
  > Students will design an XML based application for electronic commerce.

  Weighting:
  > 20%

  Criteria for assessment:
  > Well-formedness, XML Syntax, Correctness and comments.

  Due date:
  > 15 May 2012

Examinations

- **Examination 1**

  Weighting:
  > 50%

  Length:
  > 3 hours

  Type (open/closed book):
  > Closed book

Electronic devices allowed in the exam:
None

Assignment submission

It is a University requirement
(http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-procedures.html) for
students to submit an assignment coversheet for each assessment item. Faculty Assignment
coversheets can be found at http://www.infotech.monash.edu.au/resources/student/forms/. Please check
with your Lecturer on the submission method for your assignment coversheet (e.g. attach a file to the
online assignment submission, hand-in a hard copy, or use an online quiz).

Online submission

If Electronic Submission has been approved for your unit, please submit your work via the VLE site for
this unit, which you can access via links in the my.monash portal.

Extensions and penalties

Submission must be made by the due date otherwise penalties will be enforced.

You must negotiate any extensions formally with your campus unit leader via the in-semester special
consideration process:
http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html.

Returning assignments

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

Other Information

Policies

Monash has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University's academic standards, and to provide advice on how they might uphold them. You can find Monash's Education Policies at:
http://policy.monash.edu.au/policy-bank/academic/education/index.html

Key educational policies include:

- Plagiarism
  (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-policy.html)
- Assessment
  (http://www.policy.monash.edu/policy-bank/academic/education/assessment/assessment-in-coursework-po
- Special Consideration
  (http://www.policy.monash.edu/policy-bank/academic/education/assessment/special-consideration-policy.h
- Grading Scale
  (http://www.policy.monash.edu/policy-bank/academic/education/assessment/grading-scale-policy.html)
- Discipline: Student Policy
  (http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-discipline-policy.html)
- Academic Calendar and Semesters (http://www.monash.edu.au/students/key-dates/);
- Orientation and Transition (http://www.infotech.monash.edu.au/resources/student/orientation/);
  and
- Academic and Administrative Complaints and Grievances Policy
  (http://www.policy.monash.edu/policy-bank/academic/education/management/complaints-grievance-policy.
- Codes of Practice for Teaching and Learning
  (http://www.policy.monash.edu.au/policy-bank/academic/education/conduct/suppdocs/code-of-practice-tea

Student services

The University provides many different kinds of support services for you. Contact your tutor if you need advice and see the range of services available at www.monash.edu.au/students. For Sunway see http://www.monash.edu.my/Student-services, and for South Africa see http://www.monash.ac.za/current/

The Monash University Library provides a range of services and resources that enable you to save time and be more effective in your learning and research. Go to http://www.lib.monash.edu.au or the library tab in my.monash portal for more information. At Sunway, visit the Library and Learning Commons at http://www.lib.monash.edu.my/. At South Africa visit http://www.lib.monash.ac.za/.

Academic support services may be available for students who have a disability or medical condition. Registration with the Disability Liaison Unit is required. Further information is available as follows:

- Website: http://monash.edu/equity-diversity/disability/index.html;
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1 Gallery Building (Building 55), Monash University, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Sunway Campus
- Telephone: 03 9905 5704, or contact the Student Advisor, Student Commuity Services at 03 55146018 at Sunway

Reading list

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