FIT3021
Infrastructure for e-commerce

Unit Guide

Semester 1, 2015

Last updated: 02 Mar 2015

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FIT3021 Infrastructure for e-commerce - Semester 1, 2015

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 (Off-campus)
- South Africa (Day)

Workload Requirements

Minimum total expected workload equals 12 hours per week comprising:

(a.) Contact hours for on-campus students:

- 2 hours of lectures
- One 2-hour tutorial

(b.) Study schedule for off-campus students:

- Off-campus students generally do not attend lecture and tutorial sessions, however should plan to spend equivalent time working through the relevant resources and participating in discussion groups each week.

(c.) Additional requirements (all students):

- A minimum of 8 hours independent study per week for completing lab and project work, private study and revision.

See also Unit timetable information

Additional workload requirements

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

Mr Stephen Huxford

Campus Lecturer

Gippsland

Joarder Kamruzzaman

South Africa

Johann Smith

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 the Student Evaluation of Teaching and Units (SETU) survey. 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, see:

www.monash.edu.au/about/monash-directions/ and on student evaluations, see:
www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html

Previous Student Evaluations of this Unit

Based on previous student feedback this unit is well structured and no changes have been made for this semester.

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

Academic Overview

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;
- appreciate the importance of a secure information infrastructure in conducting electronic commerce;
- appreciate the privacy and legal issues;
- grasp the on-going development in emerging electronic commerce technologies including mobile commerce;
- develop skills in XML to produce small applications.

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 on Friday 17 April 2015 (midnight)
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 on Friday 22 May 2015 (midnight)
12	Intellectual property	
	SWOT VAC	No formal assessment is undertaken in 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 learning system.

Teaching Approach

Lecture and tutorials or problem classes

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

Assessment Summary

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

Assessment Task	Value	Due Date
Report on a selected infrastructure topic	30%	Friday 17 April 2015 (midnight)
XML based application or design	20%	Friday 22 May 2015 (midnight)
Examination 1	50%	To be advised

Assessment Requirements

Assessment Policy

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

Academic Integrity - Please see resources and tutorials at
http://www.monash.edu/library/skills/resources/tutorials/academic-integrity/

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 the 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:
  > Friday 17 April 2015 (midnight)

- **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:
  > Friday 22 May 2015 (midnight)

Examinations

- **Examination 1**

   Weighting:
   50%
   Length:
   3 hours
   Type (open/closed book):
   Closed book
   Electronic devices allowed in the exam:
   None

Learning resources

Reading list

The unit materials (unit book posted on Moodel) refers to many the web-resouces that are publicly available. In addition the following books may be consulted.

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.

Monash Library Unit Reading List (if applicable to the unit)
http://readinglists.lib.monash.edu/index.html

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

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.monash.edu.au/exams/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.

Assignment submission

It is a University requirement (http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-academic-integrity-managing-pla 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 electronic submission). Please note that it is your responsibility to retain copies of your assessments.

Online submission

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

Required Resources

Please check with your lecturer before purchasing any Required Resources. Limited copies of 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)

Limited copies of 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. The full text of this book is available at http://proquestcombo.safaribooksonline.com.ezproxy.lib.monash.edu.au/0596000456.

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:
www.policy.monash.edu.au/policy-bank/academic/education/index.html

Faculty resources and policies

Important student resources including Faculty policies are located at
http://intranet.monash.edu.au/infotech/resources/students/

Graduate Attributes Policy

http://www.policy.monash.edu/policy-bank/academic/education/management/monash-graduate-attributes-policy.h

Student Charter

www.opq.monash.edu.au/ep/student-charter/monash-university-student-charter.html

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 http://www.monash.edu.au/students. For Malaysia see http://www.monash.edu.my/Student-services, and for South Africa see http://www.monash.ac.za/current/.

Monash University Library

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

Disability Liaison Unit

Students who have a disability or medical condition are welcome to contact the Disability Liaison Unit to discuss academic support services. Disability Liaison Officers (DLOs) visit all Victorian campuses on a regular basis.

- Website: http://www.monash.edu/equity-diversity/disability/index.html
- Telephone: 03 9905 5704 to book an appointment with a DLO; or contact the Student Advisor, Student Commuity Services at 03 55146018 at Malaysia
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1, Building 55, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Malaysia Campus