

Business Internet Systems

Module guide

2012/2013

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| Module Title: | Business Internet Systems |
| Module Code: | BBM007 |
| Level: | M |
| Module availability: | MSc Business Information Technology and other Postgraduate business courses |

Lecturers

| Name | Room | Email | WWW |
|-------------|-------------|------------------------|--|
| Barry Avery | 209 | B.Avery@kingston.ac.uk | www.barryavery.com/blog/teaching |

Barry Avery will take lectures and labs during this course.

Aims And Objectives

This course aims to provide a theoretical understanding and practical competence in the techniques of structured systems analysis and design applied to the new and emerging fields of Business Internet Systems. Students should be able to identify the characteristics, limitations and applicability of a variety of development approaches to systems distributed via the Internet.

Students who complete the course should be able use a structured development approach in order to design and implement an Internet based system.

Learning Outcomes

At the end of the module students should be prepared to:

- Analyse and define a problem specification
- Apply a variety of Systems Development methodologies to a problem specification
- Comment on the suitability of a variety of Systems Development methodologies
- Generate an internet based solution to a problem specification

Indicative Syllabus

System Development strategies: The applicability of conventional methodologies to the Internet, Assessing the appropriateness of a system/methodology, Business Internet Models the importance of standards

Software specification: Requirements definition, Formal specification, Pseudo-code, Prototyping

Software Design: Modelling, normalisation, User Interface Design, Open Source

Programming Techniques, Tools and technologies: Reliability, Reuse, CASE tools, Development Environments, Server Side Scripting languages, Internet technologies

Query Languages: QBE, SQL, extensions to SQL, TSQL, OSQL

Systems Development management: Validation, Verification, Testing, Planning, Maintenance, Documentation

Approach to Teaching and Learning

The course will consist of lectures, case studies, tutorials and lab sessions. The primary aim being to balance theory with practical application. Lectures will normally be used to cover the theoretical underpinnings of the subject, whilst tutorials and Lab sessions will develop this knowledge into applicable skills. Students will use a combination of tools and development environments to gain first hand knowledge of the techniques and tools available to aid in systems development.

Assessment

One individual assessment, which is a portfolio of the work, exercises and tasks you perform during the module (50%) and a group project (50%). More information about this is given online and during the course itself.

Indicative Reading and teaching materials

The main course text is:

Connolly T. and Begg C. (2010) Database Systems, Addison Wesley, 5th Ed.

The following texts will be referenced during the course – you are not required to buy any of these (although you may find that if you are serious about fully learning a particular subject area, then you may wish to add them to your bookshelf). There are copies of these in the LRC.

Paul Albitz and Cricket Kiu, (2001) DNS and BIND, O'Reilly, 4th ed.

Simon Garfinkel and Gene Spafford, (2002), Web Security and Commerce, O'Reilly, 2nd ed.

Leon Shklar and Richard Rosen, (2003), Web Application Architecture, Wiley

Rasmus Lerdorf, Kevin Tatroe (2002), Programming PHP

There are many books on the technical aspects of this course (such as the server side scripting and database work). It is worth investigating the Safari bookshelf to which the University subscribes – the full content of many of these books is available over the web for free. Note that you must be using a computer connected to the University infrastructure for this to work.

Other references and materials will be given throughout the course. A complete run down of materials is available from the web site

Materials for this module will be under the Business Internet Technologies hyperlinks @ baryavery.com – you do not need to access *studentspace* to get these materials