FIT2076 Web-database interface - Semester 2, 2012

This unit provides students with the knowledge, understanding and skills required to develop an application system which uses a web interface to a back-end database. The unit assumes a sound basic knowledge of programming and database concepts and skills as developed in the introductory units in these areas (FIT1002 and FIT1004). The emphasis in the unit is on mastery of the key concepts and the basic knowledge and skills required to build this kind of application. The unit will provide students with an awareness of the wide range of technologies which are used to support this kind of application, but will examine only a limited number of these technologies to demonstrate the key concepts and their application.

The unit will take a strongly practical focus in examining the technology issues involved, and highlight the key issues which a developer needs to address in developing applications of this kind for real-world systems.

Mode of Delivery

Caulfield (Day)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload

Lectures: 2 hours per week
Tutorials/Lab Sessions: 2 hours per week per tutorial and up to an additional 8 hours in some weeks for completing lab and project work, private study and revision.

Unit Relationships

Prohibitions

FIT2028, FIT2029, FIT3043, FIT3057

Prerequisites

FIT1002 and either FIT1004 or FIT2010

Chief Examiner

Ms Janet Fraser
Campus Lecturer

Caulfield

Janet Fraser
Academic Overview

Outcomes

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

- understand the need and importance for system developers to have skills in this area of IT applications;
- know the key basic technologies which underlie the development of web-database applications;
- understand the key technological issues confronting developers building applications of this type;
- know the key features of programming languages which are commonly used for developing web-database application;
- develop a typical web-database interface using a well-known programming language.

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

2. 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): 60%; In-semester assessment: 40%

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Value</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1 - PHP</td>
<td>20%</td>
<td>Friday 31 August 2012 at 2pm</td>
</tr>
<tr>
<td>Assignment 2 - ASP.NET</td>
<td>20%</td>
<td>Friday 19 October 2012 at 2pm</td>
</tr>
<tr>
<td>Examination 1</td>
<td>60%</td>
<td>To be advised</td>
</tr>
</tbody>
</table>

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 without comments

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.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

Examination material or equipment

Refer to http://walkabout.infotech.monash.edu.au/walkabout/fit2076

Details will made available during semester. Please confirm with Lecturer.
<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No formal assessment or activities are undertaken in week 0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Web database concepts, web database technologies, web services, virtual directories. History of PHP, installing PHP, PHP and IIS, PHP and Apache, PHP configuration</td>
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<tr>
<td>2</td>
<td>Data types and operators, language constructs. Installing Oracle, installing SQL developer, creating and populating a database table, using PHP to connect to Oracle</td>
<td></td>
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<tr>
<td>3</td>
<td>Using PHP to connect to MySQL. Data Access Layer concepts, using PHP Data Objects</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Use of HTML forms. Executing SQL Inserts, Updates and Deletes with PHP and Oracle. Dropdown lists, multiple check boxes and text boxes.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Introduction to ASP.NET, software requirements, ASP.NET installation, Visual Studio, web.config file. HTML form limitations, ASP.NET Server Controls, event driven programming and Postback, MS Online documentation. Assignment 1 due Friday 31 August 2012 at 2pm</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>C# data types, operators and language constructs</td>
<td></td>
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<tr>
<td>8</td>
<td>DataSource controls - Oracle, MySQL and MS Access</td>
<td></td>
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<tr>
<td>9</td>
<td>Data controls, using DataSource controls to manipulate data, GridView paging and sorting</td>
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<tr>
<td>10</td>
<td>Master Pages and Skins</td>
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<tr>
<td>11</td>
<td>Validation, Navigation and Login Controls</td>
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</tr>
<tr>
<td>12</td>
<td>Accessing the Web Server File System. Assignment 2 due Friday 19 October 2012 at 2pm</td>
<td></td>
</tr>
<tr>
<td>SWOT VAC</td>
<td>No formal assessment is undertaken in SWOT VAC</td>
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</tr>
</tbody>
</table>

*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

Academic Integrity - Please see the Demystifying Citing and Referencing tutorial at http://lib.monash.edu/tutorials/citing/.

**Assessment Tasks**

**Participation**

• **Assessment task 1**

  **Title:** Assignment 1 - PHP  
  **Description:** PHP web site that enables administration of DVD Rental database.  
  **Weighting:** 20%  
  **Criteria for assessment:** Quality of completed work.  

  Confirm with Lecturer about specific location of marking guide available at http://walkabout.infotech.monash.edu.au/walkabout/fit2076  
  **Due date:** Friday 31 August 2012 at 2pm

• **Assessment task 2**

  **Title:** Assignment 2 - ASP.NET  
  **Description:** ASP.NET web site that enables users to search for DVDs for rent.  
  **Weighting:** 20%  
  **Criteria for assessment:** Quality of completed work.  

  Confirm with Lecturer about specific location of marking guide available at http://walkabout.infotech.monash.edu.au/walkabout/fit2076  
  **Due date:** Friday 19 October 2012 at 2pm

**Examinations**
Assessment Requirements

- **Examination 1**
  
  **Weighting:**
  60%
  
  **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](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/](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.


**Returning assignments**

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

**Resubmission of assignments**

Resubmission of assignments is not allowed.
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)
- Special Consideration (http://www.policy.monash.edu/policy-bank/academic/education/assessment/special-consideration-policy.html)
- 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/)
- Codes of Practice for Teaching and Learning (http://www.policy.monash.edu/policy-bank/academic/education/conduct/suppdocs/code-of-practice-teaching-and-learning.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 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 Community Services at 03 55146018 at Sunway