MONASH University
Information Technology

FIT2076
Web-database interface

Unit Guide

Semester 2, 2013

Last updated: 19 Aug 2013

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FIT2076 Web-database interface - Semester 2, 2013

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)
- Sunway (Day)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload requirements

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

One of FIT1002, FIT1008, FIT1035, FIT2034, FIT2071 or FIT2081 and one of FIT1004 or FIT2010

Chief Examiner

Ms Janet Fraser

Campus Lecturer

Caulfield

Janet Fraser

Sunway

Hee Jeong Lee

Tutors

Caulfield

Ali Alammary

Academic Overview

Learning 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.

Unit Schedule

Week	Activities	Assessment
0		No formal assessment or activities are undertaken in week 0
1	Web database concepts, web database technologies, web services, virtual directories. History of PHP, installing PHP, PHP and IIS, PHP and Apache, PHP configuration	
2	Data types and operators, language constructs. Installing Oracle, installing SQL developer, creating and populating a database table, using PHP to connect to Oracle	
3	Using PHP to connect to MySQL. Data Access Layer concepts, using PHP Data Objects	
4	Use of HTML forms. Executing SQL Inserts, Updates and Deletes with PHP and Oracle. Dropdown lists, multiple check boxes and text boxes.	
5	Accessing the Web Server File System. File uploads.	
6	Introduction to MVC Design. Purpose and advantages of MVC compared to Web Forms development.	
7	Introduction to CakePHP. Overview of CakePHP installation on different server platforms	Assignment 1 due Friday 13 September 2013 at 2pm
8	Web site design using CakePHP layouts and integrated CSS.	
9	Using CakePHP to access Oracle, MYSQL and SQL Server databases.	
10	Authorisation and Authentication with CakePHP. Integrating plug-ins with CakePHP	
11	Using CakePHP to access the Web Server file system. Uplaoding files, sending email with CakepHP	
12	Purpose and advantages of jQuery. Integrating jQuery with CakePHP. Integrating content management systems with CakePHP	Assignment 2 due Friday 25 October 2013 at 2pm
	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.

Assessment Summary

Examination (3 hours): 60%; In-semester assessment: 40%

Assessment Task	Value	Due Date
Assignment 1 - PHP	20%	Friday 13 September 2013 at 2pm
Assignment 2 - CakePHP	20%	Friday 25 October 2013 at 2pm
Examination 1	60%	To be advised

Teaching Approach

Lecture and tutorials or problem classes

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

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 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 a Horse Riding School 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 13 September 2013 at 2pm

- **Assessment task 2**

  Title:
  Assignment 2 - CakePHP
  Description:
  CakePHP web site that enables users to search for Horses and Instructors for lessons.
  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 25 October 2013 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

Learning resources

Monash Library Unit Reading List
http://readinglists.lib.monash.edu/index.html

Feedback to you

Examination/other end-of-semester assessment feedback may take the form of feedback classes, provision of sample answers or other group feedback. Please check with your lecturer on the feedback provided and take advantage of this prior to requesting individual consultations with staff. If your unit has an examination, you may request to view your examination script booklet, see http://intranet.monash.edu.au/infotech/resources/students/procedures/request-to-view-exam-scripts.html

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

- Informal feedback on progress in labs/tutes
- Graded assignments without comments

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.

Resubmission of assignments

Resubmission of assignments is not allowed.

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). 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.

Examination material or equipment

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

Details will made available during semester. Please confirm with Lecturer.

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

Key educational policies include:

- Aademic integrity; http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-academic-integrity-policy.h
- Assessment in Coursework Programs; 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.ht
- 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/dates/
- Orientation and Transition; http://intranet.monash.edu.au/infotech/resources/students/orientation/
- Academic and Administrative Complaints and Grievances Policy; http://www.policy.monash.edu/policy-bank/academic/education/management/complaints-grievance-policy.h
- Code of Practice for Teaching and Learning; http://www.policy.monash.edu.au/policy-bank/academic/education/conduct/suppdocs/code-of-practice-teac

Graduate Attributes Policy

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

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 Sunway 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 Sunway, 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.htmlTelephone: 03 9905 5704 to book an appointment with a DLO; or contact the Student Advisor, Student Commuity Services at 03 55146018 at SunwayEmail: dlu@monash.eduDrop In: Equity and Diversity Centre, Level 1, Building 55, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Sunway Campus

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

Previous student feedback has indicated that the inclusion of 2 technologies (PHP and ASP.NET) is too overwhelming for one unit. Therefore the unit content has been changed, so that only PHP will be taught. The inclusion of CakePHP will demonstrate industry relevant MVC design patterns.

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