FIT5042
Enterprise application development for the web

Unit Guide

Semester 1, 2011

The information contained in this unit guide is correct at time of publication. The University has the right to change any of the elements contained in this document at any time.

Last updated: 27 Feb 2011
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FIT5042 Enterprise application development for the web - Semester 1, 2011

This unit provides students with an understanding of the design and development of systems that support the large enterprise in a web-based environment. Students will learn of the theoretical issues that need to be considered by the enterprise and how they can affect the development of the enterprise application. A number of techniques will be introduced as the technological means to build such an application with specific emphasis on the Java EE technology.

Mode of Delivery

Gippsland (Off-campus)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload

This unit is offered in off campus mode only in Semester 1 2011. You are expected to spend 12 hours per week on various activities including reading, programming, discussing with other students and unit lecturers, and preparing for tutorial solutions and assignments

Unit Relationships

Prohibitions

CSE5060

Prerequisites

Recommended knowledge: Students undertaking this subject are expected to have a sound understanding of the concepts of the object oriented programming language, Java.

Chief Examiner

Chris Ling

Campus Lecturer

Gippsland

Guojun Lu
Learning Objectives

At the completion of this unit students will:

- understand various issues pertaining to enterprise software architecture on the web;
- acquire techniques to develop enterprise applications using the Java programming language;
- discover various advanced Java technologies used to build web applications for the enterprise;
- learn to competently use the advanced Java libraries to build a medium-size web application for the enterprise.

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

Assignments: 100%

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Value</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>30%</td>
<td>Monday 11th April 2011</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>30%</td>
<td>Monday 9th May 2011</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>40%</td>
<td>Monday 6th June 2011</td>
</tr>
</tbody>
</table>

Teaching Approach

This unit in Semester 1 2011 is offered in off campus mode only. Students will be provided with detailed weekly study guides, tutorials and discussion forums at the unit Moodle site.

Feedback

Our feedback to You

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

- Graded assignments with comments
- Other: Comments on your tutorial solutions and general discussions in the news groups
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 https://emuapps.monash.edu.au/unitevaluations/index.jsp

Required Resources

You will need access to (The details of these resources will be specified in the weekly study guides):

- Java SE 6
- NetBeans IDE with Java EE support and Glassfish application server

Hardware Requirements:

- A computer with access to the Internet

Recommended Resources

(1) The Java EE 6 Tutorial

This is the official Java EE 6 tutorial from Oracle. We will use a number of chapters and example codes from the Tutorial. It is available at:

http://download.oracle.com/javaee/6/tutorial/doc/

(2) The Java Tutorial available at http://download.oracle.com/javase/tutorial/

Additional subject costs

N/A

Examination material or equipment

N/A
# Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date*</th>
<th>Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>21/02/11</td>
<td>No formal assessment or activities are undertaken in week 0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>28/02/11</td>
<td>Week 1: Unit Overview and Enterprise Architecture Concepts</td>
<td>Please Note: This schedule of Topics and Assessment Tasks is subject to change during semester.</td>
</tr>
<tr>
<td>2</td>
<td>07/03/11</td>
<td>Week 2: Java EE Application Architecture</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>14/03/11</td>
<td>Week 3: Introduction to JavaServer Faces Technology</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>21/03/11</td>
<td>Week 4: Getting started with simple web applications</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>28/03/11</td>
<td>Week 5: Developing Web Pages with JavaServer Faces Technology</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>04/04/11</td>
<td>Week 6: Introduction to Enterprise JavaBeans</td>
<td>Assignment 1 due Monday 11th April 2011</td>
</tr>
<tr>
<td>7</td>
<td>11/04/11</td>
<td>Week 7: Session Beans</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>18/04/11</td>
<td>Week 8: Example Applications using EJBs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mid semester break</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>02/05/11</td>
<td>Week 9: Introduction to Java Persistence</td>
<td>Assignment 2 due Monday 9th May 2011</td>
</tr>
<tr>
<td>10</td>
<td>09/05/11</td>
<td>Week 10: More Features of Java Persistence</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>16/05/11</td>
<td>Week 11: Example Applications with Persistence</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>23/05/11</td>
<td>Week 12: Put it all together to develop enterprise applications</td>
<td>Assignment 3 due Monday 6th June 2011</td>
</tr>
<tr>
<td>13</td>
<td>30/05/11</td>
<td>SWOT VAC</td>
<td>No formal assessment is undertaken SWOT VAC.</td>
</tr>
</tbody>
</table>

*Please note that these dates may only apply to Australian campuses of Monash University. Off-shore students need to check the dates with their unit leader.

## Assessment Policy

To pass a unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit's examination, and
- 40% or more in the unit's total non-examination assessment, and
- an overall unit mark of 50% or more.

If a student does not achieve 40% or more in the unit examination or the unit non-examination total assessment, and the total mark for the unit is greater than 50% then a mark of no greater than 49-N will be recorded for the unit.
Assessment Tasks

Participation

• Assessment task 1

  Title: Assignment 1
  Description: This assignment will have two parts. In the first part you will be asked to provide short
  answers to issues in developing enterprise applications. In the second part, you will write some simple web
  applications. More details will be made available in the assignment specification.
  Weighting: 30%
  Criteria for assessment: This is an individual assignment and is to be entirely your own work.
  Submission will be via Moodle.
  The assignment will be marked against criteria of correctness and clarity.
  Further detailed assessment criteria will be available with the assignment specification.
  Due date: Monday 11th April 2011

• Assessment task 2

  Title: Assignment 2
  Description: This assignment will have two parts. In the first part, you will be asked to provide short
  answers to some important enterprise development issues. In the second part, you will write programs based on concepts covered up to now in this unit. More details will be made available in the assignment specification.
  Weighting: 30%
  Criteria for assessment: This is an individual assignment and is to be entirely your own work.
  Submission will be via Moodle.
  The assignment will be marked against criteria of correctness and clarity.
  Further detailed assessment criteria will be available with the assignment specification.
  Due date: Monday 9th May 2011

• Assessment task 3

  Title: Assignment 3
  Description:
In this assignment, you will develop a substantial enterprise application based on what you have learned in the entire unit. More details will be made available in the assignment specification.

**Weighting:**
40%

**Criteria for assessment:**
This is an individual assignment and is to be entirely your own work.

Submission will be via Moodle.

The assignment will be marked against criteria of correctness and clarity.

Further detailed assessment criteria will be available with the assignment specification

**Due date:**
Monday 6th June 2011

**Examinations**

**Assignment submission**

Assignment coversheets are available via "Student Forms" on the Faculty website:
http://www.infotech.monash.edu.au/resources/student/forms/
You MUST submit a completed coversheet with all assignments, ensuring that the plagiarism declaration section is signed.

**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:

**Returning assignments**

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

**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:

Key educational policies include:

- Plagiarism
  (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-policy.html)
- Assessment
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. 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. 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://adm.monash.edu/sss/equity-diversity/disability-liaison/index.html;
- Telephone: 03 9905 5704 to book an appointment with a DLO;
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1 Gallery Building (Building 55), Monash University, Clayton Campus.

Reading List


We will refer to a number of chapters in this book. The full text is available online through the Monash library site at: http://library.monash.edu.au/vwebv/holdingsInfo?searchId=3084&recCount=20&recPointer=5&bibId=2977712

(2) Wutka, M. Special Edition: Using Java 2: Enterprise Edition, QUE, Indianapolis, 2001. (Some chapters from this book will be provided online from the library reading list.)