FIT3144
Advanced computer science project

Unit Guide

Semester 2, 2013

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.

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FIT3144 Advanced computer science project - Semester 2, 2013

This unit is intended to provide practical experience in designing, developing and testing a non-trivial computer science project. Projects are generally software-based, although sometimes they may involve hardware development or investigation of theory. Projects cover the whole process of software (or hardware) development, from analysis through design to implementation and testing. Comprehensive written documentation on the project is required. Students are assigned in groups to a project supervisor. There are no lectures in this unit, although students will be expected to attend regular meetings with their project supervisor. The application problem will normally be drawn from the student's field of specialisation.

Mode of Delivery

Clayton (Day)

Contact Hours

1 hr project meeting/wk

Workload requirements

The workload in this unit is equivalent to a 12 credit point unit, i.e. 24 hours study per week.

Contact hours will consist of regular meetings with your supervisor.

Unit Relationships

Prohibitions

CSE3301, FIT3036

Prerequisites

FIT2004 or FIT3140 plus completion of a named minor or of 24 points of units counting towards a named major.

Chief Examiner

Dr David Albrecht

Campus Lecturer

Clayton

David Albrecht
Academic Overview

Learning Outcomes

At the completion of this unit students will have:

- A knowledge and understanding of:
  - strategies for developing a non-trivial programming, hardware, or theory-based project;
  - how to locate and utilise prior research and methods on a particular topic;
  - how to cite bibliographic references the student has used to understand various components of the project, support claims on knowledge, events, hypotheses and theories;
  - how to document software development from a user and application programming perspective;
  - software development methods: analysis, design, implementation and testing applied to the design and development of a non-trivial project.

Developed attitudes that enable them to:

- acknowledge the importance of attending and contributing to meetings as a method of gaining important information and ideas about the project;
- understand the basic requirements of software development from both user and developer perspectives; - appreciate the importance of correctly acknowledging the work of others in researching solutions to problems;
- value the role of work books in documenting a projects progress and keeping track of its development.

Developed the skills to:

- search, access, and analyse research literature as part of the process of developing solutions to problems;
- understand the importance of analysis, design, documentation, and testing in developing a non-trivial software project;
- write a moderately detailed report explaining methodology, outlining their contributions and the contributions of others, documenting the developed project from developer and user perspectives.

Demonstrated the communication skills necessary to:

- understand the role of the client (or user) in the software development process;

appreciate the importance of written communication in documenting project development;

- understand the importance of assessing time and resource requirements in the successful completion of non-trivial projects;
- appreciate the importance of time and resource management in order to deliver non-trivial projects to deadlines.
## Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>No formal assessment or activities are undertaken in week 0</td>
</tr>
<tr>
<td>1</td>
<td></td>
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<tr>
<td>2</td>
<td></td>
<td>Details for the reading unit will be defined and approved individually by the academic supervisor for each student in a learning contract, which will include objectives, assessment details, due dates and an initial reading list. The details of the agreed assessment will be submitted to the Chief Examiner by the end of week 2 of the semester.</td>
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SWOT VAC

Examination period

### Assessment Summary

Projects are assessed by individual project supervisors.

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Value</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Assessment Contract</td>
<td>100%</td>
<td>The details of the agreed assessment will be submitted to the Chief Examiner by the end of week 2 of the semester.</td>
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</table>

*Unit Schedule details will be maintained and communicated to you via your learning system.
Teaching Approach

You will be presented with information and guided on how to best find solutions for a given problem.
Assessment Requirements

Assessment Policy

Faculty Policy - Unit Assessment Hurdles

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

Assessment Tasks

Participation

• Assessment task 1

  Title: Assessment Contract
  Description: Assessment may be comprised of a research paper, project report, or equivalent, but will be equivalent to the workload associated with one 12 credit point unit.
  Weighting: 100%
  Criteria for assessment: Details for this unit will be defined and approved individually by the academic supervisor for each student in a learning contract, which will include:

  ♦ objectives,
  ♦ assessment details,
  ♦ due dates and
  ♦ an initial reading list.

  Due date: The details of the agreed assessment will be submitted to the Chief Examiner by the end of week 2 of the semester.

Learning resources

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

Feedback to you

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

• Graded assignments with 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.

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.
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:

- Academic integrity; http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-academic-integrity-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/dates/
- Orientation and Transition; http://intranet.monash.edu.au/infotech/resources/students/orientation/
- Graduate Attributes Policy
  http://www.policy.monash.edu/policy-bank/academic/education/management/monash-graduate-attributes-policy.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 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.html
Telephone: 03 9905 5704 to book an appointment with a DLO; or contact the Student Advisor, Student Community Services at 03 55146018 at Sunway
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, 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