MONASH University
Information Technology

FIT3036
Computer science project

Unit Guide

Semester 2, 2014

Last updated: 21 Jul 2014

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FIT3036 Computer science project - Semester 2, 2014

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.

Mode of Delivery

- Clayton (Day)
- Malaysia (Day)

Workload Requirements

Minimum total expected workload equals 12 hours per week comprising:

(a.) Contact hours for on-campus students:

- One 1-hour project meeting

(b.) Additional requirements (all students):

- A minimum of 11 hours independent study per week for completing project work and private study.

Unit Relationships

Prohibitions

CSE3301, FIT3144

Prerequisites

FIT2004 or FIT3140

Chief Examiner

Dr Sid Ray

Campus Lecturer

Clayton

Marc Cheong

Consultation hours: One hour meeting per week

Sid Ray

Consultation hours: One hour meeting per week

Ingrid Zukerman

Consultation hours: One hour meeting per week

Malaysia

Jojo Wong

Consultation hours: One hour meeting per week

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

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

Week	Activities	Assessment
0		No formal assessment or activities are undertaken in week 0
1	Preliminary Reading	
2	Preliminary Reading	
3	Project Plan	
4	Project Plan	
5	Project Design	
6	Project Design	Project Specification due 3pm, Friday, End of Week 6
7	Test Plan	
8	Implementation & Testing	
9	Implementation & Testing	
10	Implementation & Testing	
11	Presentations	Final Presentation / Demonstration due Week 11 (for students allocated in Week 11)
12	Presentations	Final Presentation / Demonstration due Week 12 (for students allocated in Week 12); Test Report, Workbook and Final Report all due Friday, 3pm, End of Week 12
	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.

Teaching Approach

Problem-based learning

Students are encouraged to take responsibility for organising and directing their learning with support from their supervisors.

Assessment Summary

Projects are assessed by individual project supervisors.

Assessment Task	Value	Due Date
Project Specification	20 marks	3pm, Friday, End of Week 6

Unit Schedule

Final Demonstration / Presentation	10 marks	Week 11 or Week 12 (students to be allocated)
Test Report	10 marks	3pm, Friday, End of Week 12
Workbook	10 marks	3pm, Friday, End of Week 12
Final Report	50 marks	3pm, Friday, End of Week 12

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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 resources and tutorials at
http://www.monash.edu/library/skills/resources/tutorials/academic-integrity/

Assessment Tasks

Participation

- **Assessment task 1**

    Title:
    Project Specification
    Description:
    Includes a project plan, external and internal specifications, and a test plan.
    Weighting:
    20 marks
    Criteria for assessment:
    Correctness and completeness of the project plan, external and internal specifications and test plan.
    Due date:
    3pm, Friday, End of Week 6

- **Assessment task 2**

    Title:
    Final Demonstration / Presentation
    Description:
    A demonstration of the software in a working environment.
    Weighting:
    10 marks
    Criteria for assessment:
    Quality of working demonstration being presented.
    Due date:
    Week 11 or Week 12 (students to be allocated)

- **Assessment task 3**

    Title:
    Test Report
    Description:
    Report detailing the outcomes of testing.
    Weighting:
    10 marks
    Criteria for assessment:
    Completeness of report.

Due date:
3pm, Friday, End of Week 12

- **Assessment task 4**

Title:
Workbook
Description:
A notebook (or computer file) containing weekly entries describing what has been accomplished through the week. Details on how the workbook should be organised are supplied with the project details.
Weighting:
10 marks
Criteria for assessment:
Completeness of workbook, including at least 10 weekly entries.
Due date:
3pm, Friday, End of Week 12

- **Assessment task 5**

Title:
Final Report
Description:
This provides a complete description of the project, the code, its results and interpretation of the results.
Weighting:
50 marks
Criteria for assessment:
Clarity, organisation and completeness of both the report and the code. The quality of the interpretation and analysis of the results will be a significant factor.
Due date:
3pm, Friday, End of Week 12

Learning resources

Reading list

Any required or recommended textbooks will be determined by individual project supervisors on a case-by-case basis.

Monash Library Unit Reading List (if applicable to the unit)
http://readinglists.lib.monash.edu/index.html

Faculty of Information Technology Style Guide

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 after official results have been published. 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
- Other: Informal feedback on progress in project meetings, and marked project reports

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/student-academic-integrity-managing-pla 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.

Required Resources

Please check with your lecturer before purchasing any Required Resources. Limited copies of prescribed texts are available for you to borrow in the library, and prescribed software is available in student labs.

For projects students will normally need access to a computer and programming environment.

Individual requirements will be identified by project supervisors.

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:

- Student Academic Integrity Policy and Student Academic Integrity: Managing Plagiarism and Collusion Procedures ;
  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

Faculty resources and policies

Important student resources including Faculty policies are located at
http://intranet.monash.edu.au/infotech/resources/students/

Graduate Attributes Policy

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

Student Charter

www.opq.monash.edu.au/ep/student-charter/monash-university-student-charter.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 Malaysia 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 Malaysia, 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 Commuity Services at 03 55146018 at Malaysia
- 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, Malaysia Campus