FIT4002
Software engineering studio project

Unit Guide

Semester 1, 2011

Last updated: 02 Mar 2011

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Students will undertake a large project and work in groups on a software project for a client. The client may be internal to Monash or from the industry or research organisation. In general, projects involve all aspects of the system development lifecycle. Groups are responsible for their own project management, with guidance from a supervisor. Some projects will warrant students working in pairs or individually.

Contact Hours

2 hrs lectures/wk

Workload

For Software Engineering Studio unit, the workload commitments are for 2 semesters of study:

- two-hour lecture/seminar series
- laboratory assessment on ongoing basis as per milestones & hurdles given in the assessment component (requiring advance preparation)
- a minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.
- 1 group presentation & assessment interviews (group & individual) per semester
- You will need to allocate up to 5 hours per week in some weeks

Unit Relationships

Prohibitions

CSE4002

Prerequisites

FIT3077 or CSE3308 and one of FIT2002, FIT3086 or BUS2176

Chief Examiner

Peter Tischer

Campus Lecturer

Clayton

Peter Tischer

Contact hours: In semester 1, Peter Tischer will supervise all groups and matters can be raised during weekly group meetings.

Learning Objectives

At the completion of this unit students will have:

- experience of all stages in the development of a SE project
- experience of the role and responsibilities of clients and developers in a SE project
- understanding of the way in which computer systems are designed, developed and implemented;
- understanding of the role of methodologies, tools and techniques;
- understanding of the processes and components of a quality system;
- ability to adopt a systematic and professional approach to the production of quality computer systems;
- understandig of ethical behaviour;
- ability to plan and manage the full range of activities in an SE project;
- ability to work productively in a team and individually;
- ability to communicate effectively with clients and users;
- ability to develop and deliver on time a computer system that meets the specified requirements.

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%

Assessment Task	Value	Due Date
Full year Project	100%	See weeks due in schedule and details on MUSO - Blackboard
Attendance - mandatory for classes	See hurdle page on Blackboard (MUSO) for details	Attendance mandatory

Teaching Approach

Studio teaching

Studio teaching is a facilitated active, participatory, peer learning approach.

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 with 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.monash.edu.au/about/monash-directions/directions.html
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

Customised Software Engineering laboratory (the MUSE lab) at Clayton with the standard lab image plus high end software engineering & testing tools from IBM/Rational, Websphere software from IBM, Testing tools from Compuware. Open source tools such as Eclipse, Junit & coverage testing tools

Unit Schedule

Week	Date*	Activities	Assessment
0	21/02/11		No formal assessment or activities are undertaken in week 0
1	28/02/11	sem 1: Welcome to Unit/Admin/Team selection/Project selection. sem 2 - Update on Project status from student teams. Lecturer - to set the ground rules for sem 2	
2	07/03/11	sem 1: Process and Problem Solving	fortnightly team meeting with supervisor
3	14/03/11	sem 1: Project Management	sem 1 & 2: Progress report fortnightly odd weeks except week 1, sem1 & week 13 sem 2; sem 1- indiv. seminar

			preference to Lecturer; prelim. proj. plan(PMP);
4	21/03/11	sem 1: Analysis and Requirements Engineering	fortnightly team meeting with supervisor;
5	28/03/11	sem 1 : Architecture and Design	Penultimate PMP; Legal agreements signed by client &students; group peer assessment; Prelim. software req.; Preliminary Project Management Report
6	04/04/11	sem 1: Software process; Sem 2- seminar series, hurdles/milestones checks	fortnightly team meeting with supervisor
7	11/04/11	sem 1: class seminar series by Lecturer/student teams; sem 1 & 2 : SE Project	sem 1: prelim software prototype;
8	18/04/11	sem 1: class seminar series by Lecturer/student teams; sem 1 & 2: SE Project	fortnightly team meeting with supervisor
		Mid semester break	
9	02/05/11	sem 1: class seminar series by lecturer/student teams; sem 1 & 2:SE Project	sem 1: penultimate SRS; software walk through;
10	09/05/11	sem 1: class seminar series by lecturer/student teams; sem 1 & 2:SE Project	fortnightly team meeting with supervisor;
11	16/05/11	sem 1: class seminar series by lecturer/student teams; sem 1 & 2:SE Project	sem 1: Final PMP & SRS; Individual SWEBOK Interview in sem 1 & 2 weeks 10-11;
12	23/05/11	group presentations	Group presentation of project
	30/05/11	SWOT VAC	No formal assessment is undertaken SWOT VAC

*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:
  Full year Project
  Description:
  The Full year project is worth 100 marks. Sem 1 & 2 each are worth 50 marks each. Hurdles must be met as well as Milestones which are worth marks. Due dates are prior to class on the week assigned for assessments. The milestones on the MUSO site includes weeks for both sem 1 & 2.
  Weighting:
  100%
  Criteria for assessment:
  Please refer to FIT4002 handbook on the MUSO - Blackboard site for the unit for complete description of the unit and a tabular detail of the criteria for assessment.
  Due date:
  See weeks due in schedule and details on MUSO - Blackboard

- **Assessment task 2**

  Title:
  Attendance - mandatory for classes
  Description:
  See hurdle page on Blackboard (MUSO) site.
  Weighting:
  See hurdle page on Blackboard (MUSO) for details
  Criteria for assessment:
  Please refer to FIT4002 handbook on the Blackboard site for the unit for criteria for assessment.
  Due date:
  Attendance mandatory

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:
http://www.infotech.monash.edu.au/resources/student/equity/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

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)
- Assessment
  (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.h
- 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/);
  and
- Academic and Administrative Complaints and Grievances Policy
  (http://www.policy.monash.edu/policy-bank/academic/education/management/complaints-grievance-policy.

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

- Relevant Journal Articles and Conference Proceedings depending on the project chosen.
- Gilb T and Graham D, Software inspection, Addison-Wesley, 1993
- Stiller, Project-based Software Engineering, Prentice-Hall, 2001
- Humphrey W, Managing the software process, Addison-Wesley,1989
- Pfleeger S.L., Software Engineering Theory and Practice, Prentice Hall 2001
- Somerville I.S., Software Engineering Addison Wesley 2001
- Sallis P, Tate G and MacDonell S, Software Engineering: Practice, Management, Improvement, Addison-Wesley, 1995
- Humphrey W, Introduction to the Personal Software Process, Addison Wesley 2000
- Pressman R.S., Software Engineering, A Practitioner's approach, Fifth Ed., McGraw Hill, 2001
- Maciaszek, Requirements Analysis and System Design: Developing Information Systems with UML 2001, Prentice-Hall, 2001