



MONASH University
Information Technology

FIT5152
User interface design and usability

Unit Guide

Semester 2, 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: 22 Aug 2011

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FIT5152 User interface design and usability - Semester 2, 2011

This unit provides detailed understanding of user interface design principles and practices and usability for computer-based systems. The principles, guidelines and standards for incorporating human factors in computer interface design are explored. The unit examines issues in interface design and usability from various perspectives and how to manage this during systems development. It explores contemporary issues including: background and underpinning theories, guidelines and standards, design processes and implementation in practice, user interface evaluation methods, interface styles and componential design. The application of HCI design in other environments such as virtual reality and mobile devices will be covered.

Mode of Delivery

- Caulfield (Evening)
- South Africa (Day)

Contact Hours

2 hrs lectures/wk, 1.5 hr laboratory/wk

Workload

This is a 6 point unit which, according to University guidelines, requires you to spend 12 hours of work per week on it (a total of at least 144 hours per semester).

The anticipated workload is:

- 2 hours per week lecture (commencing 26 July 2011), and
- 1.5 hours per week tutorial/laboratory (commencing 2 August 2011)

Plus approximately:

- 5.5 hours per week on preparation, online contributions and assignments, and
- 3 hours per week minimum on additional reading.

Unit Relationships

Prohibitions

IMS5302, CSE5930

Prerequisites

For MAIT Students [FIT9019](#) and [FIT9030](#).

For all other students [FIT9003](#).

Chief Examiner

Associate Professor Julie Fisher

Campus Lecturer

Caulfield

Julie Fisher

Contact hours: Tuesday 3pm - 5pm

South Africa

Stella Ouma

Contact hours: To be advised

Tutors

Caulfield

Ambica Dattakumar

Contact hours: To be advised

Academic Overview

Learning Objectives

At the completion of this unit students should be able to:

- understand from a management as well as technology perspective how the theories, guidelines and standards can be incorporated into the design of user interfaces;
- understand and apply the principles of interface design relating to HCI, this includes recognising good and bad examples;
- apply the standards, principles and theories in practice.
- develop and conduct usability evaluations and be able to interpret the results, identify changes that are needed to a user interface
- understand the different design considerations for designing for the Web and other devices
- understand the different user centred development methodologies that look at design from a user perspective. In particular have knowledge of the basic principles of good interface design and HCI principles;
- appreciate the difficulties users face when working with systems and be able to comprehend the concepts and principles underlying effective interface design and recognise good design from poor design and what the difference is from a user perspective;
- develop attitudes which enable them to interact effectively with users in order to apply this knowledge to the design of interfaces for a range of technologies;
- analyse the component parts of an interface so to be able to identify what is good design;
- synthesise the knowledge, guidelines and theory to understand how each contributes to practice;
- effectively conduct an evaluation of an information system especially in terms of usability of information systems;
- understand the development of systems from a user perspective;
- appreciate the difficulties users face when working with systems;
- apply the principles, standards and theories relating to interface design and HCI to information systems development;
- gather user requirements effectively;
- design an effective user interface;
- conduct a usability test and interpret the outcome;
- recognise poor design and solutions.

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

Examination (3 hours): 50%; In-semester assessment: 50%

Assessment Task	Value	Due Date
Assignment 1	10%	Week 5 Tutorial
Assignment 2	20% (15% written component, 5% presentation)	Written component due Friday 21 October 2011, presentation due Week 11 or Week 12 Tutorial (to be confirmed)
Regular participation in online discussion forums	10%	Ongoing (Week 2 to Week 11)
Active participation in tutorials	10%	Weekly (Week 2 to Week 10)
Examination 1	50%	To be advised

Teaching Approach

- **Lecture and tutorials or problem classes**

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

- **Other**

Moodle discussion and readings: Students are encouraged to take responsibility for organising and directing their learning.

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
- Test results and feedback
- Other: Marking guides will be provided for each assignment and feedback against the marking guide will be given when assignments are assessed

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

The prescribed text is:

Shneiderman, B and Plaisant C (2010). Designing the User Interface, 5th edition Pearson.

A reading list and other resources, for each tutorial will be available weekly on Moodle. All reading material will be available from the library in PDF format. Any other material will be provided online.

Unit Schedule

Week	Activities	Assessment
0	Register for tutorials, log into Moodle and download reading guide for Week 1	No formal assessment or activities are undertaken in week 0
1	Introduction and overview (no tutorial in Week 1)	
2	Theories, standards and guidelines	
3	Interface design background	
4	Menus, forms and icons	
5	User Interaction	Assignment 1 due Week 5 Tutorial
6	Designing user information	
7	Evaluation and usability testing	
8	The web and other interfaces (what is different?)	
9	Data gathering, task analysis and prototyping	
10	Accessibility	
11	Development taking a User Centred Design approach	Assignment 2 presentation due Week 11 Tutorial (to be confirmed)
12	Guest speaker (to be confirmed)	Assignment 2 presentation due Week 12 Tutorial (to be confirmed); Written component of Assignment 2 due 4pm Thursday 20 October 2011
	SWOT VAC	No formal assessment is undertaken 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 MUSO (Blackboard or Moodle) learning system.

Assessment Requirements

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

During the semester you will be assessed on work in, and preparation for, tutorials, in particular the specifically assigned reading for each week. The assessment will be dependent on the quality of your answers based on the readings. A number of exercises may be set and students will be expected to complete those exercises either during the tutorial, or in preparation for the tutorial, and to actively participate in tutorial classes. Assessment will occur in tutorials from Week 2 to Week 10.

This assessment will constitute 10% of your marks. No marks are awarded for simply *attending* tutorials.

• Assessment task 1

Title:

Assignment 1

Description:

Students will demonstrate, *in class*, their knowledge and understanding of form design and the relevant theories covered in the unit up to this point of the semester. Students will be required during the tutorial to design a form based on a case study that will be provided during the tutorial.

Further details will be provided in semester.

Weighting:

10%

Criteria for assessment:

Quality of the form designed (based on the learning to date) and the justification provided for the design.

Due date:

Week 5 Tutorial

• Assessment task 2

Title:

Assignment 2

Description:

Assessment Requirements

Assignment 2 is a **group assignment**. There are two components to the assignment, a written component and presentation. The assignment is designed to provide you with the practical experience of designing and conducting an evaluation of a website.

The written component will be a literature review relevant to the topic, the design, and implementation of the evaluation, in line with what has been studied during the semester. There will be a number of websites you can choose from for the assignment.

Groups must be organised and finalised by Week 9. Group presentations will take place ***in the tutorial classes, in Weeks 11 and 12.***

Further details will be provided in semester.

Weighting:

20% (15% written component, 5% presentation)

Criteria for assessment:

All students in the group will be given the same mark unless an adjustment is made by the lecturer based on feedback from the group.

The written component will be assessed on the design of the evaluation conducted, quality of the content, understanding of the concepts and background literature .

The presentation will be assessed on the quality of the presentation and the delivery, the content selected for the presentation and its relevance.

Due date:

Written component due Friday 21 October 2011, presentation due Week 11 or Week 12 Tutorial (to be confirmed)

Remarks:

Students will be asked to provide confidential peer assessment of the work and contribution of each member of the group. This will be taken into account when the final marks are awarded. An individual's mark in the group may be adjusted up or down in the light of the peer assessment. The group will be required to detail the work to be completed by each member of the group and this is to be submitted before Week 9. This will also be used where necessary to adjust marks.

• **Assessment task 3**

Title:

Regular participation in online discussion forums

Description:

From Week 2 to Week 11 you are expected contribute to online forum discussions, including posting new topics that are relevant to the unit and meaningful responses to the postings of other students.

Weighting:

10%

Criteria for assessment:

Simply posting to a forum does not guarantee that you will receive any marks, the awarding of marks depends on the ***quality of your contribution.***

Due date:

Ongoing (Week 2 to Week 11)

Remarks:

Students will be notified of the opening and closing of forums for their contributions during semester.

- **Assessment task 4**

Title:

Active participation in tutorials

Description:

From Week 2 to Week 10 you are expected to actively participate in tutorial classes. Students will be asked questions relating to the reading material and the tutorial tasks.

Weighting:

10%

Criteria for assessment:

Quality of answers / responses.

Demonstrate an understanding of the reading material provided.

Due date:

Weekly (Week 2 to Week 10)

Examinations

- **Examination 1**

Weighting:

50%

Length:

3 hours

Type (open/closed book):

Closed book

Electronic devices allowed in the exam:

None

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).

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

Referencing requirements

Students should be aware of and adhere to the guidelines for referencing assignment work. This will be discussed in Lecture 3. Please also refer to the guidelines provided by the library.

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:

<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-p>)
- 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>)
- Codes of Practice for Teaching and Learning
(<http://www.policy.monash.edu.au/policy-bank/academic/education/conduct/suppdocs/code-of-practice-tea>)

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.