



**COMP3511/9511 Human Computer Interaction**

***Assignment 1***

**Session 2, 2017**

**User Interface Critique Concepts**

**DUE: Friday, August 25<sup>th</sup> at 1pm**

**A submission link will be made available on Moodle one week prior to the due date. As you submit, your assignment will be passed through a plagiarism check. If there are any issues, you can re-submit the assignment and a new plagiarism report will be generated. PLEASE NOTE THAT FOR SECOND AND SUBSEQUENT SUBMISSIONS, IT TAKES 24 HOURS TO GENERATE THE PLAGIARISM REPORT, SO DO NOT LEAVE THIS TO THE LAST MINUTE!**

## Introduction

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In this assignment you will use the frameworks presented in the first lecture (user experience goals, usability goals, heuristics and design principles) to critically analyse ONE user interface. You will also answer questions that will provide a good introduction to the next several weeks of lectures and help you to better understand the presented concepts.

This document is for both undergraduate students enrolled in **COMP3511** and postgraduate students enrolled in **COMP9511**.

## Assessment

Please ensure you read the following carefully, as there is important information regarding how you are to submit the assignment.

- The assignment constitutes **12%** of your final assessment.
- This assignment is to be completed individually.
- A late penalty of 10% will be deducted per day (or part thereof) late. Assignments more than 5 days late will not be marked. Assignments submitted after 1pm on the due date will be marked as late.

## Submission

The assignment is to be submitted electronically through Moodle as a **PDF** with a file size **under 5MB**. If your assignment cannot be reduced to only 5MB, then please discuss this with your tutor well in advance of the submission date. Submitting your assignment late because you could not reduce the file size is not an excuse.

The assignment is due and to be submitted online (using the provided link) in week 5, **Friday August 25<sup>th</sup> at 1pm**.

**IMPORTANT NOTE: In the final hours or so before the submission deadline, Moodle often experiences a high load as students try to submit at once. A late submission because Moodle was overloaded is not a valid excuse. Upload earlier! Uploading your assignment earlier, will also give you a chance to make any necessary changes to your work if plagiarism is detected by the plagiarism checker upon submission.**

## User Interface Critique

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In designing a user interface, the best approach is to perform an iterative review and refinement based on feedback from your users. This model is applied through all the stages of development. Before you start the process of designing an interface, however, it is important to know what characteristics or principles a website should adhere to. It is important to be able to critique what makes a website good or bad, without simply stating that you do or do not like it. The critique should allude to formal user interface principles and theories and should not just be based on your own ideas. The process of providing a critique involves not just stating negative aspects of the interface, but also the good. The point of critiquing is to provide fixes or improvements to the problems encountered, using formal principles and methods. In the first COMP3511/COMP9511 Assignment, you are expected to learn how to critique **a user interface**.

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The following presents a list of steps that you need to follow to complete the assignment. Please set out your work clearly in a report based format.

1. **“BACKGROUND” Study and Prepare** - Read Chapter 1 of the textbook Interaction Design (Sharp et.al, 2015). This will help you to review the concepts that are required for completing a critique, such as Design Principles, User Experience Goals, Usability Goals, and Heuristics. You will be expected to use all four of these categories in your analysis of each website.
  - For Design Principles: Section 1.6.3 (p25-32) in Interaction Design (Sharp, et. al 2015). Also further details in Chapter 1 (Norman, 1998)
  - For Use Experience Goals: Table 1.1 (p22) in Interaction Design (Sharp et. al, 2015). More information on User experience goals, Section 1.6.2 (p22-25) in Interaction Design (Sharp et. al, 2015)
  - For Usability Goals: Section 1.6.1 (p19-22) in Interaction Design (Sharp et. al, 2015)
  - For Heuristics: section 15.2.1 (p501-509) in Interaction Design (Sharp et. al, 2015)
2. **“INTERFACE” Choose 1 Interface from the list below**, clearly state what website you have chosen and describe the purpose of this website in one or two paragraphs.
  - The provided websites differ in purpose but share a common theme of “Transport”.
  - Please make sure you review the English language Australian website versions (if available) - they are different than the international language versions.
  - The website you choose MUST be a DESKTOP version of the site.
  - The following is a list of websites. You are required to choose **ONE** website from this list:

Website	URL	Category
Honk Car Rental	<a href="http://www.honkcarrental.com">http://www.honkcarrental.com</a>	Car Rental
Sydney Trains	<a href="http://www.sydneytrains.info">http://www.sydneytrains.info</a>	Sydney Trains/Public Transport
Wicked Campers	<a href="http://www.wickedcampers.com.au">http://www.wickedcampers.com.au</a>	Camper Van

3. **“USERS” Who do you think would use this website?** Give examples of five different types of people that would use this website. Try to come up with different types of people (who may have differing needs)!
4. **“TASKS” What is each of the people above trying to accomplish when they use this website?** For each type of person that you identified above, please describe a function or task that they are trying to achieve when they use your selected site.
5. **“WALKTHROUGH” Now, choose two tasks from the tasks you described above, and try to complete these tasks when using your selected interface.** State the two tasks that you have chosen to complete, and who the users are that will be undertaking these tasks, and in one paragraph explain why you have chosen these particular users and their tasks.
6. **“ANALYSIS” As you do your walkthrough of the interface, note down any issues you are having or any positive aspects of the interface that you see in an issues table:**
  - a. Critique the interface, summarising your findings in an Issues Table (the issues table will be included in your Appendix). Your critique is based on Design Principles, User Experience Goals, Usability Goals and Heuristics (See Appendix A for more information on each of these if needed). You should also take sketches/screenshots and point out specific features on the sketches. *We strongly encourage you to take regular screenshots as the websites are live and can change without notice.*
    - You must use all four categories in the critique: namely Design Principles, User Experience Goals, Usability Goals and Heuristics. Please use the actual terminology from the principles. You should also define the principles the first time you use them (make sure to reference where you got the definition from. **HINT:** Read the textbook).
    - You may not be able to find examples of every attribute or principle and multiple criteria may apply to the same aspect of the interface.
    - You must consider both positive and negative observations.
    - State which aspect of the user interface is a representative example of each principle. For instance, you would note alongside your sketch/annotated–screenshots that “the arrangement of buttons provides a poor mapping because...”. Please note that stating “the arrangement of buttons provides a poor mapping...” is not a sufficient response, and you must be able to justify each of your points.
    - Make sure to note every issue in your issues table. Number each of the issues that you discovered in your walkthrough. The issues table will then consist of Issue Number, Description of Issue, Heuristic/Design Principle etc. that applies to this issue, Positive/Negative. Optionally you can include a section/screenshot of your sketch in the table (though you may wish to add a column which lists the relevant sketch (or sketch annotation number)). The table of

issues will be discussed in class in Week 3. Please refer to Appendix B for an example of an issues table)

7. **“ACCESSIBILITY”** In your walkthrough, did you encounter any issues that impact the accessibility of the interface? Please describe these issues in about half a page. Please make sure that you consider more than one disability in your discussion and more than one issue.
8. **Report** – write a detailed report summarizing all the issues that you have found (please refer to your issues table as you go along). Suggest any possible improvements that can be made, based on your findings. Please do not exceed the five page limit. The following should be used as a guide for structuring your report:
  - A. CSE Cover Page and Statement of Originality filled out (this will be made available on Moodle on Monday, 14<sup>th</sup> August) – THIS IS NOT INCLUDED IN YOUR PAGE LIMIT
  - B. Title Page – THIS IS NOT INCLUDED IN YOUR PAGE LIMIT
  - C. 2 - Choice of interface and stated purpose of interface (0.5 page)
  - D. 3 - Users (1 paragraph, up to 0.25 page)
  - E. 4 - Tasks (0.5 page)
  - F. 5 & 6 - Analysis/Critique (with reference to the issues table at all times) (3.5 pages)
  - G. 7 - Accessibility Issues and Observations (0.5 page)
  - H. References - Your references can either be part of your 5 page limit, or can be included outside of this in the Appendices
  - I. Appendix (maximum 4 pages)
    - a. Issues Tables
    - b. Annotated Sketches and/or Annotated Screenshots  
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**Note to the above:** The number of pages above are guidelines and suggested maximums for each section. You do not need to fill the suggested space. The maximum for the report is 5 pages, and for the Appendix is 4 pages.

### Formatting

Please read the following carefully, as there are marks for your formatting and presentation.

- The report should be presented in an A4 document.
- 12-point font should be used for the main body of text.
- The report, *excluding* the cover pages and appendix, must be a maximum of 5 pages.
- The appendix should be kept under 4 pages.

- Consider including the following: (HINT: Use this as a checklist)
  - Page numbers
  - Header on each page
  - Footer on each page
  - Consistent font sizes (e.g. Use 1 font size for all headings)
  - Line spacing
  - Correct use of paragraphs
  - Use of the spell checker and grammar checker
  - Correct use of professional referencing techniques in both the body of the text as well as including a full list of references at the end. For more details about how to reference within a report, please use the following resource: <https://student.unsw.edu.au/harvard-referencing>
  - Include your personal details such as name, student number, tutorial time, and tutor on the title page.

It is our experience that many CSE students who study HCI go on to work in design and UI work, where reporting is highly regarded. You **must** take pride in your reports and make them presentable. They are easy marks you cannot afford to lose.

## Learning Outcomes

### 1. User Interface Critique

- Be able to define the user experience goals, usability goals, heuristics and design principles.
- Apply your understanding of the user experience goals, usability goals, heuristics and design principles to formally evaluate a user interface.
- Identify both positive and negative aspects of design.
- Understand how the design of a system is influenced by the intended audience.
- Consider accessibility issues.
- To understand the practical issues of real-world interface design and evaluation.

## Plagiarism

If plagiarism is detected a maximum penalty of zero marks will be awarded for this assignment. Note that all cases of plagiarism are reported to the School Plagiarism officer. **All assignments are run through a plagiarism checker so it would be ill advised to copy and paste either from the web, or from another student. Assignments are checked against a database of past and present submissions, along with online websites and other resources.**

### What is Plagiarism?

Plagiarism is the presentation of the thoughts or work of another as one's own. \* Examples include:

- direct duplication of the thoughts or work of another, including by copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;
- paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;
- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

For the purposes of this policy, submitting an assessment item that has already been submitted for academic credit elsewhere may be considered plagiarism.

Knowingly permitting your work to be copied by another student may also be considered to be plagiarism.

Note that an assessment item produced in oral, not written, form, or involving live presentation, may similarly contain plagiarised material.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does *not* amount to plagiarism.

The Learning Centre website is main repository for resources for staff and students on plagiarism and academic honesty. These resources can be located via:

<https://student.unsw.edu.au/plagiarism>

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:



- correct referencing practices;
- paraphrasing, summarising, essay writing, and time management;
- appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.
- Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

\* Based on that proposed to the University of Newcastle by the St James Ethics Centre.  
Used with kind permission from the University of Newcastle

† Adapted with kind permission from the University of Melbourne.

## References

Sharp H, Rogers Y and Preece J (2015) Interaction Design: Beyond Human-Computer Interaction, 4th Edition, John Wiley, England

Norman DA, (1998) The Design of Everyday Things, MIT Press

## Appendix A

<b>Design Principles</b>	<b>User Experience Goals</b>	<b>Usability Goals</b>	<b>Heuristics</b>
Affordance	Satisfying	Effectiveness	Match between system and the real world
Visibility	Enjoyable	Efficiency	User Control and Freedom
Feedback	Fun	Safety	Consistency and Standards
Constraints	Entertaining	Utility	Help users recognise, diagnose and recover from errors
Mapping	Helpful	Learnability	Error Prevention
Consistency	Motivating	Memorability	Recognition rather than recall
	Aesthetically pleasing		Flexibility and Efficiency of Use
	Frustrating		Aesthetic and minimalist design
	Boring		Help and Documentation
	Rewarding		Visibility of System Status
	Annoying		

## Appendix B

Reference	Issue Description	Principle	Type	Severity

*Reference:*

Choose how you would like to number or reference your issues

*Issue Description:*

Describe briefly and succinctly the issue

*Principle:*

State the Design Principle, User Experience Goal, Usability Goal or Heuristic this issue applies to/is an example of.

*Type:*

Positive or negative, can use a + or a – to denote

*Severity:*

0 = Not a usability issue (a technical bug)

1 = Cosmetic issue (fix if there is time)

2 = Minor issue (should fix)

3 = Major issue (must fix)

4 = Showstopper (cannot release until fixed)

You can also organize based on priority of fixing the issues, of course priority is usually given based on the severity of a particular issue.