V1.4

COMP3511/9511 Assignment 1

Session 2, 2014

User Interface Critique and Design Concept

DUE: Friday August 29th (Week 5) at 1pm

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Introduction

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 two user interfaces. You will prepare a report that summarises your findings regarding the chosen user interfaces.

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 15% of your final assessment.
- This assignment is to be completed individually.
- The user interface critique will be assessed based on your written report.
- Late penalties for assignment work will be applied to submissions received after the due date and time. 10% of the total assignment mark will be deducted from the assigned mark per day 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 user interface critique of the assignment will be submitted electronically through Moodle as a PDF under 2MB. If your assignment cannot be reduced to only 2MB, 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 individual user interface critique on-line submission is due by **Friday August 29th (Week 5) 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!

User Interface Critique

The purpose of this assignment is to critique **two different user interfaces**. We will define *interface* to mean an entire collection of individual screens, pages or 'views' (when critiquing in a mobile context).

It is important to note that you are required to **critique a user interface and not the intended function of the application**. You can assume that you are using the interface for its intended function and you are judging it on how the interface aids or hinders you.

The High Level Overview will show you the steps you must carry out to complete this assignment. Detailed Steps shows additional information necessary to carry out these steps correctly.

High Level Overview
1. **Study and Prepare** - Read Chapter 1 of the textbook Interaction Design (Sharp et.al, 2011).
2. **Choose 2 Interfaces** - Choose 2 from the list of 4 (either 2 websites or 1 mobile interface and 1 website).
3. **Brainstorm** - Brainstorm in your design diary the reasons why people might use the provided websites and/or mobile interfaces.
    a. Write a scenario for each interface that would reflect their target audiences.
4. **Analysis** - For each of the two chosen interfaces
    a. Describe the main features of the interface and explain why you chose that particular interface.
    b. Critique the interface, summarising your findings in an Issues Table. You should also take sketches/screenshots and point out specific features on the sketches.
    c. Write a detailed analysis of each interface, referring to your issues table and sketches/screenshots.
    d. Consider issues of Accessibility in the interface and report your observations.
5. **General Trends** - Consider trends across both interfaces and report your observations.
6. **Report** - Collate all your written information into a report.

Detailed Steps

1. Study and Prepare

After reading Chapter 1 of the textbook Interaction Design (Sharp et.al, 2011), you should familiarise yourself with the ideas of 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.

2. Choose 2 Interfaces

The interfaces must be selected from the provided list (below) of four different websites. You can choose to either analyse:
- Two standard websites, or
- One standard website and one mobile specific website/application. (There is an option to analyse a different chosen mobile website/app. See below)

Provided Websites

The provided websites differ in purpose but share a common theme of "retail"; your job will be to consider how easy they are to find information, how well they communicate that data to you, and specifically, how they perform when considering user experience goals, heuristics, etc.

Note: Please make sure you review the English language website versions - they are different than the international language versions.

Website	URL	Category
Toyota	www.toyota.com	Motor Vehicles
Bunnings Warehouse	www.bunnings.com.au	Hardware and DIY
Asos	www.asos.com/au	Fashion
Westfield	www.westfield.com.au	Shopping Centre

Mobile Apps

If you choose to analyse a mobile app, it must:
- Be the equivalent mobile app for one of the 4 websites listed above OR
- *Be approved by your tutor* and
  Ideally be an app that allows you to browse products available for sale. If it is an app that is highly fascinating and could be critiqued, please ask your tutor.

You are encouraged to stick with one of the 4 equivalent mobile apps for the websites listed above, unless you have a very good reason to choose another one and can justify it to your tutor. *The chosen mobile app should NOT be for the same service as the website you choose to review*.

3. Brainstorm (1 page max. per scenario)

While brainstorming, consider the main target audience of the interface as well as the likely reasons a user might have to use the interface. Refer to page 347 in Preece for more information on Scenarios.

4. Analysis

a. Describe the Interface (1 page max. per interface), including a description of important functional aspects of the interface. Remember to note what the interface's intended purpose is and whether the features of the interface support that or not. Also justify why you have chosen this particular interface for review.

b. Critique the interface

Your final report for this assignment will require an Issues Table for each interface (as referenced in lectures), so make sure you print out (or sketch) elements in the interfaces you choose, which you should annotate with problems for reference later. You should also take screenshots of the interface and annotate them for inclusion in your report.

Review each of the 2 chosen interfaces considering the Design Principles, User Experience Goals, Usability Goals and Heuristics.
- You may not be able to find examples of every attribute 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…"
- Make sure to note every issue in your issues table.

Design Principles that you are considering in your critique and analysis:

      Affordances
      Visibility
      Feedback
      Constraints
      Mapping
      Consistency

**See Section 1.6.3 Interaction Design (Sharp, et.al 2011).
Also see further details in Chapter 1 (Norman, 1998)**

User Experience Goals that you are considering in your critique and analysis include:

      Satisfying
      Enjoyable
      Fun
      Entertaining
      Helpful
      Motivating
      Aesthetically pleasing
      Supportive of creativity
      Rewarding
      Emotionally fulfilling
      Boring
      Unpleasant
      Cutesy
      Frustrating
      Gimmicky
      Annoying
      And more… for a full list see Table 1.1 on pg 23 of ID
For more information on User experience goals, see Section 1.6.2 in Interaction Design (Sharp et. al, 2011)

Usability Goals that you are considering in your analysis and critique:

      Effective to use (effectiveness)
      Efficient to use (efficiency)
      Safe to use (safety)
      Have good utility (utility)
      Easy to learn (learnability)
      Easy to remember how to use (memorability)

For more information on Usability goals, see Section 1.6.1 in Interaction Design (Sharp et. al, 2011)

Heuristics that you are considering in your analysis and critique:

Visibility of system status
Match between system and the real world
User control and freedom
Consistency and standards
Help users recognise, diagnose and recover from errors
Error prevention
Recognition rather than recall
Flexibility and efficiency of use
Aesthetic and minimalist design
Help and documentation

See section 15.2.1 Interaction Design (Sharp et. al, 2011)

c. Write a Detailed Analysis of your findings (2 pages max. per interface)
- Present the issues you have in your issues table in a way that explains in detail what they are and how they relate to the criteria above. Make sure to reference your issues table and elaborate why and how the issues match the criteria. Ensure you use all four categories of criteria (as detailed in section *b* above). An analysis lacking in any of the four is not complete. Include positive and negative examples.

d. Consider issues of Accessibility (½ page max. per interface) - For instance, how would a visually impaired user engage with the interfaces? If you have chosen a mobile interface, does the application work well with provided system accessibility functionality?
Consider this question closely if your mobile device offers accessibility options; as it provides wide–ranging and feature–rich accessibility for users.
Ensure you discuss a range of accessibility issues (e.g. Not just 1, for example not only "Visually impaired users") and use evidence to support your ideas.

5. General Trends (2 pages max.) - Think about both interfaces, and consider the trends across both. Are there conclusions you can draw? For example, you might find that both interfaces do very well at consistency and are enjoyable, but both also suffer from being too hard to learn. What other general trends have you found? **You must refer back to specific examples when discussing your trends** (Hint: You already have a numbered issues table…).

You should also consider the target audience, and the purpose of the interfaces when discussing trends. It would not be useful, for example, to criticise a highly technical website for not being 'entertaining', if the target audience were scientists seeking highly technical information!

Lastly, ensure there should be a balance of positive and negative trends.

6. Report

Report Format
The following should be sections of your report
1. CSE Cover Page and Statement of Originality filled out
2. Title Page
3. Executive Summary (half page)
4. Introduction and Purpose of Report (1/2 - 1 page)
5. Description of Interface 1 with justification for choice (1 page)
6. Major findings of Interface 1 (1 - 2 pages)
7. Description of Interface 2 with justification for choice (1 page)
8. Major findings of Interface 2 (1 - 2 pages)
9. Accessibility Issues and Observations (1 page)
10. General Trends and Overall Recommendations (1 - 2 pages)
11. References
12. Appendix
    a. Scenarios (2 pages)
    b. Issues Tables
    c. Annotated Sketches and/or Annotated Screenshots

Note to the above: The numbers above are guidelines. You do not need to fill the suggested space. For example, Your 'Introduction and Purpose of the Report' does not *need* to be exactly 1 page. Please don't write waffle to fill up space.

Preparation
You now have some notes and comments about the interfaces you have chosen. The goal now is to write a coherent, formalised report. Your report is to provide a user interface evaluation of the interfaces and where appropriate, make recommendations to improve them.

You are required to use terminology from the principles (e.g., Design Principles, User Experience Goals, Usability Goals and Heuristics), rather than your own opinion. 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). However, we are assessing whether you *understand* the principles rather than being able to use the term in your responses. For instance, "the button provides good affordance" would be regarded as an insufficient response; you will need to justify *why* it has good affordance.

Before writing the report you should generate a numbered table of issues that you have discovered. This will be included in your appendix. The table must 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 numbers)). The table of issues will be discussed in class in Week 3.

An Executive Summary should present the main ideas of the report. Include

justification for the report, some background information, major analysis results and conclusions. The aim of the Executive Summary is to give a reader an overview of all the important findings of the report without requiring them to read it completely.

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 8 pages.

- The appendix should be kept under 6 pages.

- Consider including the following: (HINT: Use this as a checklist)

    o   Page numbers

    o   Header on each page

    o   Footer on each page

    o   Consistent font sizes (e.g. Use 1 font size for all headings)

    o   Line spacing

    o   Correct use of paragraphs

    o   **Use of the spell checker and grammar checker**

    o   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.

    o   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

2. Communication

To communicate your critique in written form and to accompany the report with appropriately annotated images

Be able to coherently present information in report format

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 though a plagiarism checker so it would be ill advised to copy and paste either from the web, or from another student.**

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:

www.lc.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 (2011) Interaction Design: Beyond Human-Computer Interaction, 3rd Edition, John Wiley, England

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