

AP10310 Human-Computer Interaction

This document describes the first-sit coursework assessment requirements of AP10310 for academic year 2003/04.

Introduction

For this assignment you will undertake a usability evaluation of two web-sites of your choice. In order to perform the evaluation, you will carry out a number of different analytical and investigatory activities. The assignment submission is in two parts: part 1 will be submitted in the week before the Easter break. Part 2 will be submitted at the end of the semester.

Through this assignment you will demonstrate achievement of the following learning outcomes:

- deploy human factors principles in the analysis and evaluation of computer systems [LO 46]
- apply user-centred practice in either the analysis, design and implementation or evaluation of software systems [LO 47]

The problem

You are required to choose a pair of web-sites offering similar functionality (eg Amazon and BOL, Safeway and Tesco, Epson and HP), and to design and carry out a user-interface evaluation process on these sites, both to evaluate each site independently, and to afford a basis of comparison between them.

Part 1

For the first part of the process you will plan and undertake an 'expert' evaluation, analysing and documenting the systems.

What you must submit: Your system documentation and evaluation findings, including a preliminary comparison of the two sites.

Submission mid-semester at departmental hand-in: **deadline 31st March 2004**

Part 2

You must then design and undertake a further usability study based on system users, evaluating an aspect of one or both of the web-sites which has been suggested by your previous 'expert' evaluation. Your must involve users, but the number of subjects and nature of the analysis are for you to determine.

What you must submit: a report giving the results and findings of your evaluation, with recommendations for improvement, including a simple prototype if you wish. Your research materials (completed questionnaires, interview notes, etc) must be submitted as appendices to your report.

Submission at end-semester at departmental hand-in: **deadline 11th May 2004**

Your work will be graded according to the criterion referencing model presented as a separate document.

See over for the full assignment specification.

Full assignment specification

Part 1

Expert evaluation

Perform a usability analysis of the systems' interfaces, in the light of accepted usability expertise and guidelines, using techniques such as: use case walk-throughs; hierarchical task analysis; GOMS analysis; interface state transition diagrams.

Submit your system documentation (state transition diagrams, task analysis, etc) with a brief outline of your expert evaluation findings and preliminary system comparison. Indicate the areas you intend to investigate further through user studies.

You must include an introductory section which gives brief details of the web-sites you are evaluating, including their purpose, functionality, and target audience. You should also ensure that you include the URLs for the sites.

Part 2

Usability study

Design a small-scale usability study to evaluate some aspect(s) of your chosen web-sites. This includes designing any interview questions, questionnaires, etc, and detailing how you intend to choose and brief participants.

For each aspect of your evaluation you must specify:

- What you are evaluating

- The method of evaluation you will use

- How you will measure, record and analyse the results.

Carry out the evaluation process you have specified.

Report and recommendations

Write a report detailing the evaluation you have undertaken and summarising its results. You must provide explanation and analysis to account for your findings. The submission must include as appendices all the documentation supporting your evaluation, such as completed questionnaires, interview notes, etc.

You are to make recommendations for the re-design or further development of some aspect of one of the web-sites you have been studying. Your proposal may include a simple prototype.