

## Assignment 1: Power House Museum Visit

All students must complete this assignment. This assignment is to be completed individually.

**Due:** Tuesday, August 17, 2004 (Week 4)  
**Hand in to CSE School Office during office hours,  
with cover sheet and the original museum admission ticket**

**Assessment:** 10% of your grade, compulsory

***Important: You will need to keep your admission ticket and staple it to your assignment submission.***

For this assignment you will visit the Power House Museum, Darling Harbour Sydney, where you will evaluate two *interactives* from the **Gambling in Australia Exhibition**. The goal is for you to start thinking about issues relating to the design of interactive systems and how different problems can cause usability issues. You will produce a formal report presenting two heuristic evaluations and set of recommendations for two interactives from the Gambling Exhibition. You are to assume that the reader of the report is a new employee to the Power House Museum who has been given the responsibility for managing interactives across the museum.

The principle sponsor of the exhibition is an organization that deals with the social problem of gambling in the community, so many of the exhibits you will review have a theme to expose the myths associated with gambling.

An “interactive” is the term used by the museum to describe a computer based system that provides museum visitors with an interactive experience. Typically interactives consist of a computer system, video screen, touch screen and speakers. They may also have other input or output devices depending on the task.

### ***Power House Museum Details***

Location: 500 Harris Street, Ultimo  
Visitor Information: <http://www.phm.gov.au>  
Cost: \$6 for concessions (take your UNSW Student card)  
When: 10am – 5pm, daily

Note that there is no photography permitted in the exhibition.

### ***Objectives***

- Conduct heuristic evaluations in real environments
- Write evaluation reports
- Apply your understanding of user centred design
- Enable you to think about usability in a real situation such as a museum

Take your design diary (not loose sheets of paper) with you for sketching and noting your observations, timing and ideas. Remember to date each page of your diary. From

your design diary notes, you will compile a typed report (5 pages for the whole report, excluding cover page). Photocopy relevant sketches from your design diary and attach them to the end of the report.

Once you have completed the assignment tasks, take some time to look around the museum to consider issues of design and usability for public spaces. Whilst we are not assessing this activity in this assignment your experience at the museum will be important for other aspects of this course.

### **Assignment 1 Tasks**

- Choose two interactives from the Gambling in Australia exhibition
- Review each system listing the usability issues you uncover. Tabulate your data with column headings: Time, Issue Number, Description, Status, Priority to record the time of the observation, a unique identifier, a description of the issue found, whether it is a positive or negative observation and whether you believe this to be an important or minor issue
- Try to identify both positive and negative aspects of the design.
- Sketch a flow chart of the application. Make sure that there is enough information for somebody who may not be familiar with the exhibit to understand the flow of the application
- Draw sketches of the user interface that are relevant to your discussion
- Develop a table classifying which issue is related to which heuristic. Note that one issue may be classified under one or more of the heuristics. Explain why in your table why you believe it belongs provide a sketch if necessary to explain the problem.
- Present recommendations of changes to the design of the chosen interactives

### **Interactive Exhibits**

Choose *two* of the following interactive exhibits from the Gambling in Australia exhibition and carry out a heuristic evaluation.

- Come in Spinner
- Rollup
- Lets Make a Deal
- Jackpot
- Gambling Questionnaire
- What are the Odds?
- Beat the House
- Lucko Lottery

### **The heuristics**

For this assignment you are required to use the eight heuristics presented in class, summarised below:

<i>Support workflow</i>
Ensure that it allows users to complete their tasks in way that they are accustomed to.

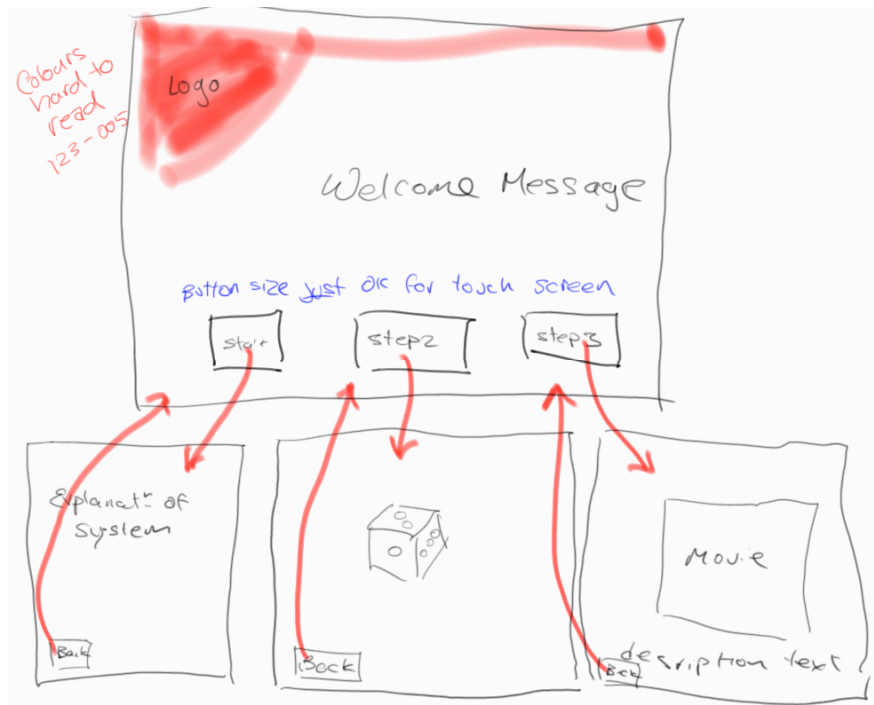
<i>Be consistent</i>
In terms of behaviour, navigation, terminology, and visual design.
<i>Provide clear navigation and orientation</i>
Make it easy and obvious how to get from one place to another in the system; make it obvious where you are in the system.
<i>Give users control</i>
Make sure that users are driving the interaction, not the computer.
<i>Increase learnability</i>
Assist users in becoming productive with the system (e.g., provide help, useful hints, etc.)
<i>Reduce memory load</i>
Don't require humans to remember things – provide instructions, provide information where and when users need it, support functions such as copy and paste.
<i>Provide effective feedback</i>
Provide meaningful and timely feedback.
<i>Optimise visual clarity</i>
Ensure that the visual representation is laid out in a way that makes it easily readable, aesthetically pleasing, and appropriate for the organisation.

### **Submission Checklist**

- Generate a maximum of a five page typed report (12 point font) including sketches.
- Type up the table of issues
- Construct the table showing issues vs heuristic with explanation
- Draw your flow diagrams
- Check spelling and grammar.
- Ensure you have referenced **all external sources of material** used in preparing your submission (including any information displayed at the Power House Museum or that you have found in text books or web sites).
- Include relevant photocopies of sketches throughout your report to help explain your observations. Label each figure and refer to the figure in the text of your report.
- Fill out the Assignment 1 cover sheet available on the class web site.
- Attach the original museum admission ticket in front of the cover sheet.
- Hand in your written report to the school office on or before the due date.
- Generate a PDF version of the report and submit using the give system. Graphics should be 72dpi.

**Example**

Time/ Date	Issue Number	Description	+/-	Priority
10:15am	123-001	Opening screen clearly indicates where to press on the touch screen	+	-
10:17am	123-002	Several buttons are shown on the screen appear to be pulsating but not all are selectable	-	Low
10:25am	123-003	Three buttons on the selection screen (screen #5) are not clearly distinguishable. Colours blend in with the background.	-	High

**Example of a Design Diary Sketch**

**Heuristic Evaluation Table (limited) Example**

Issue#	Support workflow	Be consistent	Provide clear navigation and orientation	Give users control	Increase learnability	Reduce memory load	Provide effective feedback	Optimise visual clarity
123-001	Museum users expect a consistent interface (+)	All interactives in this exhibition use a similar start screen (+)						
123-002						Overload the user since they have to figure out which are buttons and which are not (-)	Pulsating buttons would seem to indicate to the user that they should press (-) MEDIUM	
123-003								Colours of buttons not separated from the background (-) HIGH See figure 2