

COMP3511/COMP9511: Human Computer Interaction

UNSW - School of Computer Science and Engineering (2004 - Session 2)

Assignment 2 and 3 (Assignment 2: 15% of final grade, Presentation 5% of final grade,

Assignment 3: 15% of final grade)

Assignment 2 & 3: An Interactive Educational Museum Exhibit

All students must complete assignments 2.1, 2.2, 2.3, 3.1 and 3.2. The assignments require students to work in groups of 3 or 2 (no individuals working alone or groups exceeding 3). For laboratory/tutorial students your group must comprise of people from the same tutorial group. There will be a presentation in tutorials in Week 10 & 11. Assignment strand presentations will be conducted in a special time slot during the same period. Assignment strand students will need to form groups in the break during the lecture.

Important Assignment Dates

Assignment 2.1 Due 24/8, Week 5
Assignment 2.2 Due 7/9, Week 7
Assignment 2.3 Due 21/9, Week 9
Assignment 3.1 Due 5/10, Week 10
Assignment 3.2 Due 19/10, Week 11

Presentation - Weeks 10 and 11 (in tutorial/laboratory period or time to be announced for assignment strand)

Introduction

Assignment 1 required that you visit the Power House Museum to evaluate some exhibits and gain an understanding of the usability issues that a museum might encounter. In the following assignments, we expand on your observations and ask you to design an exhibit that would be appropriate for a museum like the Power House Museum.

Assignments 2 & 3 provide you with the opportunity to put all phases in the user-centred design process into practice. The assignment is structured to allow you to experience iterative design and the deliverables have been segmented into smaller, regular submissions to allow more feedback opportunities.

In Assignment 2.1 you will brainstorm and come up with a concept, develop questionnaires, identify the potential audience and develop a sheet for ethics consent. You will not conduct interviews as part of this stage. You will need to give a clear definition of what your interactive system will do.

Assignment 2.2 involves actually conducting the interviews using the questions approved by the tutor in 2.1, gathering data and developing an understanding of the interaction, information components. From these interviews you will develop scenarios that are typical for your intended audience. Essentially this stage develops the requirements of your exhibit.

Assignment 2.3 requires that each student will develop first pass paper mock-ups of the design. Having each student will work on their own designs first will enrich the possibilities and alternative for the final design. As a group you will critique each design stating how it satisfies the heuristics. The individual designs and the critique will be submitted.

Presentation Week

Your in-class presentation will give the group an opportunity to “sell” your design to the class. Explain why your design is going to be highly usable. Also help your peers understand the problems and insights you have had whilst undertaking this process.

In Assignment 3.1 we ask you to consolidate each member’s design into one single design for the group. You will need to clearly describe what was consolidated from the original three or two designs and why your new combined design is better. Use a combination of sketches and text to justify the design decisions. You will prepare a usability walkthrough using the paper prototype and conduct a study with three users. Based on your walkthroughs, you will report the main and significant findings of the observation exercise noting problems encountered by the users. You will tabulate the results so that it is clear to see which user presented a specific problem. Remember to number the issues so they can be uniquely identified.

Assignment 3.2 is the final design that you will prepare based on the outcome of the earlier walkthroughs. You will do another iteration of design, improving on your design of 3.1 and walkthrough with 3 users. You will prepare a discussion of the changes and present a story board of the final design. This should be presented as if it were a final presentation document to museum management that will consider if the project should be funded for actual development.

Throughout the process you will need to justify why your group has made certain design decisions. These decisions must be supported by analysis or results of a user studies. You are encouraged to use the design techniques discussed in lectures or in the reference material.

At no stage in these assignments are you asked to develop software or electronic prototypes. Submitting screen dumps of electronically generated screens will lead to penalties.

Topic

Your task is to design an **educational interactive exhibit** that will be for an exhibition called The Planet We Live On. Its theme is to make people aware of the geography of earth and the issues that influence our habitation of the planet. Eg. Weather, Oceans, the Environment, Volcanoes. Using user centered design techniques, develop an interactive that would be suitable for display in a museum such as the Power House Museum.

You are free to choose the exact topic with the theme of The Planet We Live On. For example you may choose to develop an interactive exhibit to educate people about earthquakes and the concept of tectonics.

The application will use a predefined multimedia kiosk that consists of a touch screen mounted over a flat screen display. Stereo speakers for audio output are also provided. Alterations to this will require a written request to your tutor to approve the change.

Groups

The assignment will require you to form groups three people (or two). All group members must be from the *same tutorial/laboratory group*. All members must be in the same tutorial group since you are all required to give a presentation of your work in the allocated time slot.

Presentation Weeks

In the tutorial/laboratory time slot of Week 10 & 11 your group will be required to provide a 10 minute presentation of your project with emphasis given to your group's outcomes from the user-centred design process. Part of your assessment will be based on this presentation.

Assignment strand students will give their presentations during a specially organised time slot. This will be announced in class.

Design Diaries

Design diaries are expected to be used throughout the process and will be checked as part of the routine assessment and on the day of presentation.

Submission

The paper version of the group assignment will be handed into the office. A cover sheet will be made available for each assignment.

Presentation

In tutorial class, you will be required to present the important outcomes of your Assignment 2 work indicating how you will use this information for Assignment 3. Specifically you should provide an introduction to your exhibit, outline the important outcomes from your interviews and present the attributes of the individual mock-ups that are likely to be used in the future design. Describe one important concept that you have learned by using this design process. All group members will be required to deliver part of this presentation.

An overhead slide projector will be available. 10 minutes is a short period of time so the number of slides should be limited to 5-7 slides. It is important that you rehearse your presentation beforehand.

This will provide an opportunity to gain additional feedback about your design from your tutor and colleagues. Use this feedback to prepare for Assignment 3.

Ethical Issues

Before starting the interview and usability sessions you will need to provide written information and consent forms to the participant explaining the purpose of the activity, how the information will be used and privacy of the information provided. Templates will be made available for this purpose and the template is a deliverable in Assignment 2.1.

This will be discussed further in lectures and published on the Assignments pages of the class web site.

Under no circumstance are you allowed to video, photograph or record audio of the usability sessions.

Privacy of the participant is to be maintained at all times. The assignment submission shall not contain any reference to individual names nor reveal information of a personal nature.

Note that the questions you are to prepare must not have any questions that are of a personal nature. Wait for your assignment 2.1 to be returned to ensure that the tutor has checked your questions.

What are we looking for?

A small component of Assignment 2.1 will be allocated to novelty and originality of the concept put forward.

For the remainder however, we are interested in you actually experiencing and describing the process of designing a system based on user-centred design principles. At each point you must be able to justify why certain decisions have been taken.

Assignment 2 must provide a clear description of the interactive exhibit proposed. So we must be able to clearly identify the information you plan to present, the interaction styles to be used and a sense of the visual elements. Your design directions will be influenced your user interviews.

In Assignment 3 you will iterate through 2 paper designs and conduct walkthroughs of the paper prototypes. The submission must demonstrate the progression of steps that has led to the group's final design from the 3 individual designs.

We have broken the submissions down into smaller deliverables so we are expecting the reports to be considerably smaller compared with previous years. We will define this a little more clearly but to start, 2.1 should be 3-4 pages. We hope that the smaller submissions, and more regular submissions enhances the feedback process so that you can develop more focused iterations of your designs.

Penalties

Assignment must be submitted on the due date. Late assignments will only be accepted if valid special consideration documentation is provided and approved. Assignments received more than 5 days after the due date will be given zero marks and not marked.

Assignments submitted late are subject to the following penalty: the maximum mark obtainable reduces by 10% per day late. Assignments will not be accepted after 5 days.