Tutorial and Laboratory – Week 8 & 9

Introduction

Today you will revisit heuristic evaluation but reflect on the memory and cognitive load implications that you have learned in recent lectures. You will need to prepare some tasks based on your week 3 design diary exercises.

You will also work through paper-based prototyping, expanding on the Zoo Guide example. You will need to do some paper-based prototyping at home before coming to class.

Related Reading

Interaction Design:
Section 1.6.1, Heuristics
Section 8.1-8.3, Prototyping and Construction, Conceptual Design
Section 15.1-15.3, Interaction Design, Nokia and Phillips mobile case study

Cognitive Load and Memory lecture notes.

Heuristic Evaluation Revisited

Review the web site exercise in Week 3, Number 3.

“Evaluate a web site of your choice for usability issues using heuristic evaluation”

Go back and review that web site and rethink your heuristic evaluation in light of the memory and cognitive load issues discussed in lectures. How has your understanding of the usability issue changed? Print out some examples and be prepared to discuss those in class.

For example, you may have initially looked at a shopping web site that required the user to read separate web pages to locate products but a different page to place an order. When you evaluated the site you found that you had to alternate between two or more different pages in order to complete the ordering task. You may have reported in Week 3 that there was a navigation issue with the site. Based on the memory and cognitive load lectures, you now understand this to be related to split attention.

Web Site Observation

In this exercise you will conduct a usability observation of another student using a web site. The web site will be the one that you evaluated in Week 3, exercise number 3. In order to carry out the observation exercise, you will have to come up with a task that the participant can do that is related to the web site you have previously examined in Week 3. Check that the web site has not changed since you last visited.

Before coming to class develop a scenario that describes a task that the participant could carry out in around 10 minutes.
For instance if it is a bookstore site, you may ask them to purchase some books on the Cosmos or find some authors who have written in this area. Obviously they should **not** have to complete the purchasing process with a credit card number!

If they have to look up something with a search, try to find alternative terminology that is not an exact match to the keyword. As an example, you may want your participant to find the prices of CD or DVD blank disks. Instead of saying, “search for blank disks” you may provide a scenario that talks about, the “(you) need to take some digital photos down to the local photo store to be printed and have run out optical media”. Remember that you are trying to find out what your participant is thinking so don’t spell it out directly.

Try to come up with a task that will confirm your findings regarding the heuristics and cognitive load issues in the previous section.

Create a scenario to define the context to help the participant understand the task. Note that you should not describe every step that they must do in order to complete the task instead, provide them with a situation in the scenario and they must role-play to act out the goals described in the scenario.

DON’T say: 1. Open the web page. 2. Click on the button that says, “Purchase” 3. Enter the word “Cosmology” etc.

DO try a scenario: It’s Fathers Day and your Dad has been talking about science programs on TV and has recently been talking about a series on Cosmology. You decide that that a book on Cosmology might be a good gift. Etc.

Print out a copy of the scenario in preparation for the web site observation session you will conduct in class. Give the scenario to your participant in class and observe what they do. Remind them to think aloud.

Use your design diary to log observations and greet your participant as if you were conducting an authentic observation session. For this exercise you don’t need a consent form but your can pretend that you have one.

Discussion Question: Compare the iCal and Address Book evaluations with web evaluations. What are the differences between evaluating desktop and web-based applications?

**Paper Based Prototyping – Zoo Guide**

This week you will develop a concept for a **handheld** Zoo Guide.

In the last tutorial/laboratory, we considered the following:

*You have been asked to design a system that will be used as an electronic guide in a zoo. The purpose will be to help zoo visitors find exhibits and find out more information about the creatures that they visit.*
In class you came up with terminology relating to the menus and categories related to the Zoo Guide system.

At home, on your own choose an aspect of the system that you wish to refine. Develop some sketches in your design diary and consider one task that you would like to evaluate. Creating several scenarios will help your thinking process. Use flow diagrams to understand the “workflow” of the particular task.

You may want to limit the number of screens that are required for the task to around 3 or a test that would take around 10 minutes for a participant to complete.

From your design create paper-based mock-ups that have “post-it” note interactive widgets that will be evaluated in class.

Prepare a printed scenario (not a sequence of steps) that will give the participant the context of the task you wish to evaluate.