Tutorial and Laboratory – Week 4 & 5

Introduction

In this tutorial we will have in-class exercises on problem solving and discuss the design diary exercises presented in Week 3. We will also start a course affinity diagram.

There are two different laboratory exercises: 1) brainstorming and 2) paper prototype usability walkthroughs.

Related Reading

Affinity Diagramming, Interaction Design, p304. The context is a little different from what we do in the exercise, but keep in mind we are just initially gathering data.
Walker, Chapter 9, available in the readings section of the course web site.
Preece (2002) Interaction Design, Section 7.6.1, on scenarios

Problem Solving – 35 minutes

See exercises in class.

Scenarios – 20 minutes

Your scenarios will be distributed to others in a small group for review and comparison. Type up the two scenarios of a University student choosing a degree (see Week 3 design diary exercises on class web site). Print out each of your two scenarios on a separate page so others can read your scenarios.

You will break into small groups to review and compare each other’s scenarios. Discuss as a group the similarities and differences. Try to come up with one scenario that embodies the ideas of all individual scenarios for your group. Type that up and email a copy to your tutor, clearly indicating your tutorial time in the subject line. On a post it note, write briefly one of the user needs that came out of your group discussion. Place it on the wall in the laboratory where directed by your tutor.

Laboratory - Brainstorming – 20 minutes

Aim

In this laboratory you will carry out some brainstorming exercises using different methods of interaction.

Background

• Lecture on Creative Thinking (Week 1)

Objectives

At the end of this laboratory, you should be able to:

• Comment on the different ways to conduct brainstorming exercises
• Explain the advantages and disadvantages of each technique

Introduction

In this laboratory you will take part in 3 brainstorming exercises. At the end of each you are to describe the advantages and disadvantages you have found from each exercise. Also count the number of different ideas generated by each method.

The different brainstorming will be conducted:
• On your own
• In pairs
• With the tutorial group, using the white board

Write down the ideas in your design diary.

Your tutor will provide the topics/ideas to initiate each exercise. Before starting, the class will discuss the rules of brainstorming.

Individual Brainstorming (5 minutes)

Write down as many ideas as you can for the following topic.

Topic/Idea/Concept: __________________________________________________

How many ideas did you come up with? ________________

Two person Brainstorming (5 minutes)

With your partner, generate as many ideas as you can for the following topic. Both of you should create your own version of the brainstorming outputs.

Topic/Idea/Concept: __________________________________________________

How many ideas did you and your partner come up with? ________________

Class Brainstorming (5 minutes)

This exercise will be conducted on the white board.

Topic/Idea/Concept: __________________________________________________

How many ideas did the class come up with? ________________

Discussion

Discuss the differences, advantages and disadvantage between the 3 methods used above. You should consider how people interacted whilst participating and how paper or the white board was used.
Laboratory Paper Based Walkthrough – 30 minutes

Aim
The aim of this laboratory is to introduce you to paper based usability walkthroughs.

In this laboratory you conduct a usability walkthrough of your the ticket system paper based prototype. You will work in groups of two and do a walkthrough of each of your designs.

Background Reading

Preece (2002), Interaction Design, Section 8.1-8.2

Objectives
This laboratory is designed for you to observe somebody else interacting with a paper-based prototype. You will conduct a walkthrough of the paper-based design of the ticket system. You will continue to develop a practical understanding of the think aloud protocol introduced last time. You will need to prepare one scenario that introduces the walkthrough participant to the task you wish to have them complete. Note that this is not a step by step guide but a description of a situation that provides context for the walkthrough task.

Keep in mind that you are not evaluating the participant but the paper based design. Try to “role-play” as a walkthrough facilitator and say to your participant, “Thanks for helping us today. The purpose of today is to evaluate the design, not the participant”.

Paper based Walkthrough
In groups of 2, take turns and complete the following:

- Greet your participant as if it were a real evaluation.
- Introduce them to the purpose of the session.
- Provide them with your scenario describing the situation.
- Remind the participant about thinking allowed.
- Present them with the paper design of screens in your design diary.
- Ask the participant to “use” your paper design as if it were a real interface.
- Write down your observations and allow the design to be annotated on paper.

Swap roles after 10 minutes.

Note as we indicated in the Laboratory 1 exercises, that the facilitator is not supposed to show the user what to do. Provide the participant with the task and then observe what they do. As a facilitator, do not be critical of the participants actions or questions as it is the paper prototype that is under test, not your participant. Don’t directly answer a participant’s question, try to answer with a more probing question.
instance, if they said “I don’t understand what this means.” You could then reply, “Well, tell me about the options you might think it means.”

The subject should act as if they are a typical user interacting with the site. As the subject, **DO NOT** attempt to conduct a heuristic evaluation of the site.

**Discussion**

What are the advantages and disadvantages of paper-based prototypes?

What did you actually discover about your design from usability walkthroughs?