Surveys and Interviews

Agenda

- Announcements

- Sketching Critiques

- Lecture – Interviews

- Design Activity

- Lecture –Surveys & Questionnaires

- Next Week

- Group Project Work Time

Announcements, Questions

- A2 & S3 due today

- Questions?

Assignment 1

- Very interesting descriptions of what you love and hate
- Many insightful design principles

- Common problems:
  - Not explaining why an interaction was successful or not
  - Describing interactions from more than a week ago
  - Not coming up with your *own* design principles
  - Not *defining* your design principles
  - Not applying design principles to your loved/hated things

Assignment 1 Grading

- I was fairly lenient this time

- I did not grade down for grammatical problems, but you need to check for
  - Typos
  - Mis-translations
  - Colloquialisms

- Get help at the campus writing center if you need it

- A+: followed instructions; completed all elements; thoughtful about experiences and design principles
- A
- A-
- B+
- B
- B-: experiences not from this week; principles not derived; missing key components of assignment

A1 – Some of Your Design Principles

- Customizability
- Multi-threading
- Task conformance
- Predictability
- Generalizability
- Familiarity
- Observability
- Responsiveness
- Readability
- Simplicity
- Consistency
- Low learning curve
- Accessibility
- Globalization
- Be aesthetically pleasing
- Adaptability and personalization
- Transparent
- Add value
- Align with the user

- Substitutivity
- Observability
- Conciseness
- Independence
- Robustness/Sturdiness
- Flexibility
- Synthesizability
- Task migratability
- Visibility
- Comfort
- Sustainability
- Persuasion
- Inference
- Remove unnecessary tasks
- Reduce uncertainty/options
- Frequent use should be most accessibly
- Follow conventions
- Task-focused
- Approachable

A1 – Some things you love and hate

Love :)	Hate :(
Google Search	UCI Webmail
Waterproof flashlight	United website
Chopsticks	Vertical blinds
iPhone	Ear buds
Car	Microwave
Netflix	Stove
Netflix envelope	Flashlight
Knife and fork	Car bluetooth interface
Shoes	Toilet sensors
Portable coffee mug	Cisco NAC agent
Facebook	Facebook
U/V Chamber for Toothbrush	Google Plus
Zipper	OS X file operation
Android Phone	Android Phone
Alarm Clock on Phone	Alarm Clock on Phone

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Sketching Critiques – 20 minutes

- Break into groups of 3 people
- Take turns showing and explaining your 3 sketches with each other
- Critics should offer advice and feedback about the idea
  - Strengths, Weaknesses, Originality, Feasibility
  - Sketcher: take notes about what feedback was offered
  - Critic: be critical, but constructive and courteous!
  - Each critic should sign and date the page after the sketches

LECTURE – User Research

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User Research – Data Gathering

- Triangulation

- Recording techniques

- Interviews

- Questionnaires

- Observations

  - Direct vs. Indirect

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Triangulation

- All user research techniques have their own **limitations**

- Use **multiple techniques** to fully understand a design scenario

  - Choose techniques that **account for the weaknesses** of each other

  - Choose techniques to cover both a **breadth and depth** of the user experience

Key Concept
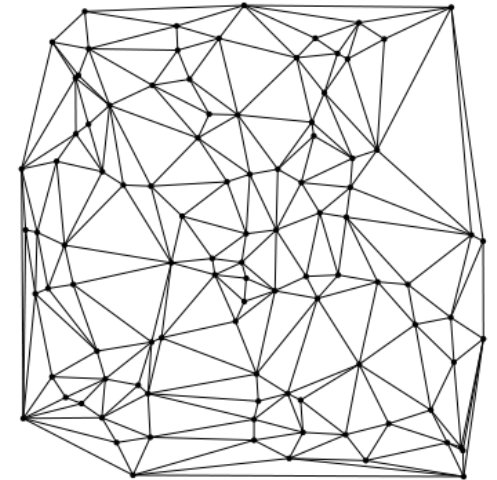
Triangulation

- What are some complementary techniques you might use to account for the weaknesses of each other?

- What are some techniques that cover both breadth and depth when combined?

Data Recording Approaches

1. Notes

2. Notes + still camera

3. Notes + Audio

4. Notes + Audio + still camera

5. Video

What are the advantages and disadvantages to each of these?

Interviews

Interviews

Purpose: Collect detailed information about tasks, activities, technologies. Understand the *why* behind activities, rather than the *what*.

Suitable for relatively small number of people (5 – 30) - Shoot for ~12 to reach data saturation, though not always feasible

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Interviews

- **Unstructured**

  Broad questions concerning some general area

- **Structured**

  Narrow questions concerning specific area

- **Semi-structured**

  Balance between broad/narrow questions

- **Focus groups**

  Group discussion around a topic

Creating an Interview Guide

- <u>Who</u> do you need to interview and <u>why</u>?
- Demographic questions
- Open questions
- Closed questions
- Activities
    - Sketching
    - Demonstrations
- Reliability and validity
- Be careful about leading questions

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Running an Interview

0. Recruitment

1. Introduction

2. Warm up session

3. Main session

4. Cool-off period

5. Closing session

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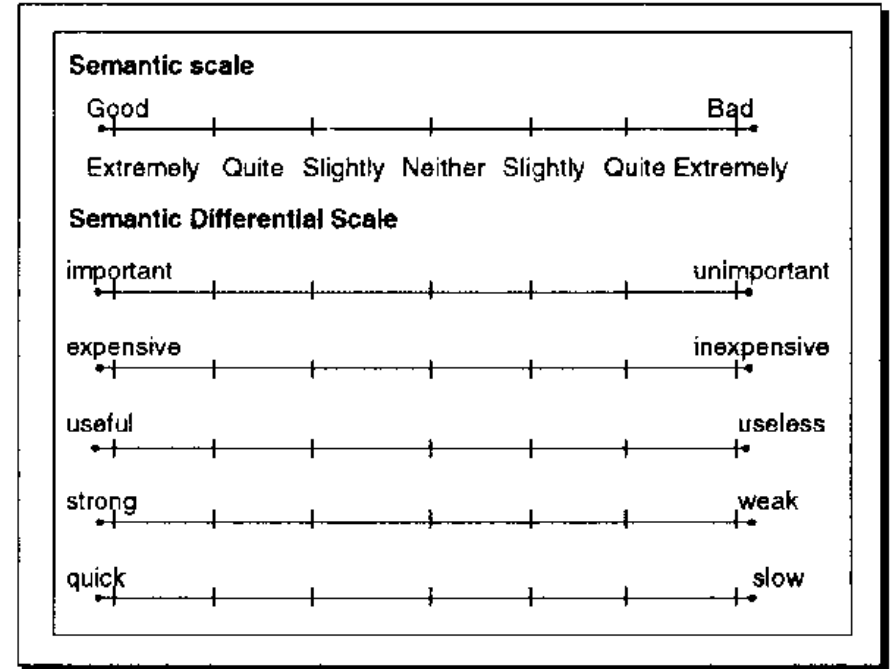Donald Bren School of Information and Computer Sciences | University of California, Irvine

Design Activity: Devising an Interview Plan – 10 minutes

Scenario: You've been asked to gather information on the design of a patient education system for hospital/doctor's office waiting rooms

You've decided to conduct some interviews and to collect data with questionnaires. Propose a plan answering these questions:

- What is the goal of the interview?
- Who do you need to interview? How many?
- What kinds of questions/activities?
- List a few specific questions

Questionnaires

Questionnaires/Surveys

- **Purpose**: Deepen understanding by collecting information from a broad range of people

- Suitable for large number of people
    - 20 – 1,000+

Questionnaires

- Be clear on the goal
- Keep it short
- Open and closed questions
- Rating scales (e.g. Likert)
- Be sure to pilot your questionnaire and expect to iterate 3-4 times
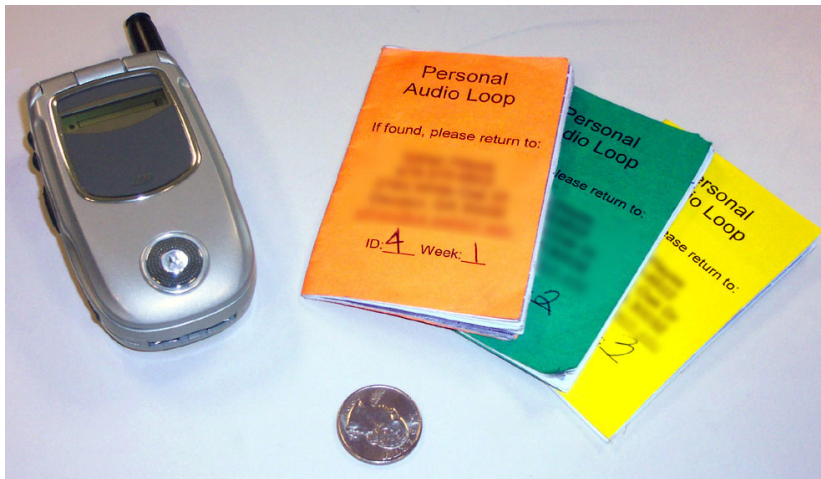- Online or on paper?

Semantic scale

Good | | | | | | Bad

Extremely Quite Slightly Neither Slightly Quite Extremely

Semantic Differential Scale

important | | | | | | | unimportant
expensive | | | | | | | inexpensive
useful | | | | | | | useless
strong | | | | | | | weak
quick | | | | | | | slow

Diary Studies (another kind of questionnaire)

- Have users carry a diary with them to answer specific questions about activities throughout the day when certain activities occur
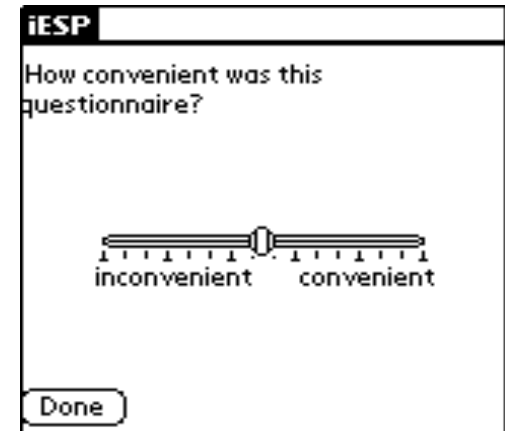
Example

- **PAL diary study**
  - Fits in one's pocket
  - Record when PAL is desirable

Experience Sampling Studies

- Have users carry around a device that has them answer questions at given intervals
  - Cell phone, PDA, SMS
- Good for getting in-the-moment assessments
- **Example:** page user once every 3 hours and ask them to fill out a short survey on their current activity and rate sleepiness level on a scale from 1 to 7

Example – Track Your Happiness

- Go to TrackYourHappiness. org and sign up

Diary Study vs. Experience Sampling

- Both can collect similar types of information

- Diary is less intrusive

- ES can be more reliable at getting regular data
  - User is less likely to forget

- Another alternative – context-based sampling
  - MyExperience Toolkit - http://myexperience.sourceforge.net/

Design Activity: Devising Questions for Questionnaires – 10 minutes

Scenario: You are designing a new video sharing system and would like to determine how people share videos online and what features they find useful and not useful

- Propose three questions (at least 1 open and 1 closed)
- Discuss ideas for distribution & recruitment techniques, paper vs. online, etc.

Summary: Consider study needs and purposes, pros/cons of methods

Triangulate!

Interviews

Focus groups

Questionnaires

Diary Studies and ESM

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Discussion: Your projects

- What methods are you considering for your project?

- How do they cover both breadth and depth?

- How do they complement one another?

Next Class

- User Research Case Studies

- Upcoming Work
  - Reflection 4 due Tuesday
  - P1 NOW DUE THURSDAY (previously was due Tuesday)
  - Sketching 4
    - Theme: Sports, Fitness, & Recreation

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GROUP PROJECT MEETING TIME

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