CSC4130
Introduction to Human-Computer Interaction

Lecture 9
Needfinding II: Interviews and Focus Groups

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Outline

- Interviews
- Focus groups

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- Interviews
- Focus groups

- A tool that can be used at any point in design process

Pros and cons of interviews

- Pros
  - Go deep
  - Be open-ended and exploratory
- Cons
  - Require to manage unbounded discussions
  - Need to high effort requirement
  - Take significant time in analysis

- Initial exploration
  - Understand the needs and challenges presented by a particular situation
- Requirement Gathering
  - Stick on an appropriately board and open-ended view of the possibilities
- Evaluation and subjective reactions
  - Focus on specific questions aimed at eliciting reactions to various design elements

- Users
  - Understand the pros and cons of specific features of an interface
- Stakeholders
  - Evaluate system operation
- Informants
  - Provide important insights in an on-going, long-term project

Interviews infinitely malleable

- Number of people
  - Individual, pairs, groups
- Scope
  - Duration, depth, and breadth
- Type
  - Structured, semi-structured, and unstructured
- Location
  - In the labs vs. reality

- Three main types
  - Open-ended/unstructured
  - Semi-structured
  - Structured
- Other categories
  - Group - focus groups
  - Retrospective - user recalls and describes
  - Contextual inquiry - user is interviewed while working

Unstructured interviews

- Most like a conversation, often go into depth

- Open questions

- Exploratory

  – Absolute key is to listen rather than talk

- Pros/cons

  – Rich data, things interviewer may not have considered

  – Easy to go off the rails

  – Time-consuming and difficult to analyze

  – Impossible to replicate

- Predetermined questions, like surveys, often with a flowchart
- Closed questions
- Short, clearly worded questions
- Confirmatory
- Pros/cons
  - Replicable
  - Potentially important details can be lost

- In between structured and unstructured
- Seek a mix of constrained and unconstrained responses
- Make sure to cover bases
  – List of items to definitely cover, responses to definitely get
- Flexibility for open-ended follow-up as situation evolves

- Structured and closed questions
  - Easy to analyze
  - Discourage elaboration and further comments
- Open-ended questions
  - Increased difficulty in analysis
  - Stimulate conversation and generate insights
- Task and exercises
- Conceptual mapping

- Simple
- Without technical terms or jargon
- No compound questions
- Unbiased and unjudgmental

What were the strengths and weaknesses of the menu layout and the toolbar?

separate

What did you think of the menu layout?

What did you think of the toolbar?

Which did you prefer?

- Pilot-testing
  - Estimate potential length of an interview
  - Find questions that are hard to understand
  - Review questions and other materials
- Clear and concise guide
- Appropriate backups
  - Crashed computer
  - Unworked recorder

- Handwritten notes (free form, coding sheet)
  - Written notes can provide context, but not always details
- Audio recording
  - Audio recording helps capture terminology, common phrases, specific details
- Video capture
  - Video recording helps provide body language
- Photos

- Rapport
  - Help interviewees feel comfortable and at ease
  - Create an environment that encourages open conversation
  - Find some common ground of shared experience or perspective
  - Be careful to avoid anythings that gets too personal

- Introduction
  - Follow a general outline
  - Tell your research and goal
  - Complete any paperwork, such as informed consent
  - Inform whether you will record and how

- Getting down to business
  - Start with relatively easy questions
  - Work as a listener
  - Provide definitions of any terms that may involve jargon
  - Be adaptable and flexible for semistructured or unstructured interviews
  - Distinguish answers that the participants give because they are trying to please you and answers that genuinely reflect their opinions.

- Promoting discussion
  - Rephrase the question in various different ways
  - Simulate feedback by physical props, note cards, and other probes

- Debriefing
  - Ask participants if they have anything else to add
  - Provide details about your research goals and the purpose of the interview
  - Summarize the interview
  - Turn off recording

- Structured interviews
  - Tabulate the frequency of each answer and use statistical tests
- Unstructured or semistructured interviews
  - Vary based on written notes or recordings

- Content analysis
  – Examine the text of the interview for patterns of usage, including frequency of terms, cooccurrences, and other structural markers

- Discourse analysis
  – Look at discussions of words and contents to examine the structure of the conversation

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- Do not pre-suppose answer
  - How often do you use your mobile phone to call family members
  - What are the ways in which you communicate with your loved ones
- Be open-ended, avoid yes/no questions
- Avoid
  - Asking long questions
  - Using compounded sentences
  - Using jargon

What do you need to bring

- Be organized Before you start
- Consent forms
- Screening forms (if participant selection not done in advance)
- Audio/video equipment
- Extra tapes, microphone, extra batteries, tripod
- Note taking equipment
- Instruments: interview scripts, surveys
- Just because it is a qualitative method does not mean that detailed preparation is not required!

Some criteria for a good interview

- Structure the time
- Have a clear beginning, middle, and end
- Give participants context
- Explain why are there, what you hope to learn
  – If they don't know, they cannot tell you
- Use props and visuals
  – E.g., photos
  – Sometimes it is easier to show than to tell
- Listen
- Make eye contact

Outline

- Interviews
- Focus groups

- 2-10 people interviewed at one time

- Usually has agenda, but may be either structured or unstructured

- Skilled moderator critical

- Usually recorded

- Pros/cons

- Can accommodate divers and sensitive issues

- Opinions developed within a social context

- Good way to locate "proto-users": most articulate, imaginative participants can help later with participatory design

- Post-test interview to clarify events that occurred during system use

- Record what happened, replay it, and ask about it

- Pros/cons

  – Excellent for following up and grounding an evaluation

  – Avoid erroneous reconstruction

  – Users often offer concrete suggestions

  – Takes time, might require a second session

Thank Prof. Narges Mahyar for many of the slides!