# Introduction to HCI Fall 2021

#### Interview

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# Logistics

- Assignment 1 late submission
  - ▶ 50% reduced grading if you submit within the week
- ▶ Team formation
  - ► Team sheet https://docs.google.com/spreadsheets/d/1o8eilk9WI1MFPkDqenGPA
    vSVUAdLywKxsHhWOjp0Mb8/edit#gid=1871247904

## Learning goals

- Explain when and why interviews may be appropriate evaluation technique choice
- Describe different types of Interviews
- Discuss pros/cons of interviewing
- ▶ Outline criteria for a good interview, and things you want to avoid doing

## Interviews: when and why

- ▶ A tool that can be used at any point in design process
- Well suited for:
  - Exploring issues
  - Learning more about tasks, scenarios of use
  - Involving users (+ making them feel involved)
  - Getting inside the user's head

## Interviews: infinitely malleable

- Some things that can vary:
  - Number of people
    - ▶ Individual, Pairs, Groups
  - Scope
    - ▶ Duration, Depth and Breadth
  - Type
    - Structured, Semi-structured, Unstructured
  - Location
    - ▶ In the lab vs. reality (in context)

#### Kinds of interviews

- ▶ Three main types:
  - Open-ended / unstructured
  - Semi-structured
  - Structured
- ▶ Other categories:
  - Group e.g. 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: practice silence!
- ▶ Pros/Cons:
  - Rich data, things interviewer may not have considered
  - Easy to go off the rails
  - Time-consuming & difficult to analyze
  - ▶ Impossible to replicate

#### Semi-structured Interviews

- ▶ In between structured & unstructured:
  - Seek a mix of constrained and unconstrained responses
  - Make sure to cover bases
    - ▶ e.g. list of items to definitely cover, responses to definitely get
  - Flexibility for open-ended follow-up as situation evolves

#### Structured interviews

- Predetermined questions
  - (like questionnaire, often with a flowchart)
- Closed questions
- Short, clearly worded questions
- Confirmatory
- ▶ Pros/Cons:
  - ▶ Replicable
  - Potentially important detail can be lost

# Group interviews (focus group)

- ▶ 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 diverse and sensitive issues
  - Opinions developed within a social context
    - Some participants may be reluctant to take opposing view
  - Good way to locate "proto-users": most articulate, imaginative participants can help later w/participatory design
  - Some interviewees may dominate

## Retrospective interview

- ▶ 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
  - Avoids erroneous reconstruction
  - Users often offer concrete suggestions
  - ▶ Takes time; might require a second session

#### How will data be recorded?

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

## 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, questionnaire?

# Some criteria for a good interview

- Structure the time
- Have a clear beginning, middle and end
- Give participants context
- Explain why they are there, what you hope to learn
  - If they don't know, they can't tell you
- Use props and visuals
  - (e.g., prototypes, photos)
  - sometimes it's easier to show than to tell
- Listen
- Make eye contact
- Refer back to things that have been said
- ▶ Be attentive, respectful, sympathetic, and flexible
- Give the participant time to think
  - but if they go off topic, OK to steer them back

# Pilot testing

- ▶ Check for:
  - duration
  - clarity of interview questions
    - non-repetitive, ability to deliver the script fluidly
  - ability to operate recording equipment
- ▶ Bottom line: do you get meaningful data?

## Primary and secondary

- ▶ There is often too much for one person to do!
- Primary
  - Usually the person who has contacted the participant and guides the discussion
- Secondary
  - Responsible for most data capture (all recording devices, primary notes, artifact collection)

#### Post session

- Debrief immediately with partner/team
- ► Type notes right away expand as appropriate (make sure to note clearly what are expansions b/c they are subject to recall)
- Check your recordings and label media
- Make a log of all the items from the session (artifacts, audio/video tapes, still images, notes...)
- ▶ Write up reflection on session (things that were not clear, surprising, ...)
- Plan for transcripts of dialog, as appropriate

#### Communication tips from some of the world's best interviewers

- ▶ 1. First Prepare Notes, Then Toss Them
- ▶ 2. Match Your Partner in mood, energy level, language and body language
- ▶ 3. Practice Flexible Listening
- ▶ 4. Activate the Power of the Pause
- ▶ 5. Cultivate Curiosity
- ▶ 6. Practice Ego Suspension: The Power of Forgetting Yourself

https://buffer.com/resources/6-powerful-communication-tricks-from-some-of-the-worlds-best-interviewers

## Comparing and contrasting interviews

- "How to do a research interview"
  - ▶ Link to full video:
  - https://www.youtube.com/watch?v=9t-\_hYjAKww
    - Contains more advice on good interviewing

## Interview guideline

- 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 compound sentences
  - Using jargon
- Asking leading questions
- ... and generally be alert to unconscious biases.

# Interviewing guideline

- ▶ Interview in everyday, familiar settings take cues from context
- ▶ Be flexible to adapt line of questioning
- Establish and maintain good rapport
- Casual conversation is not bad
- Assume respondent is expert
- Do not interrupt unnecessarily
- Plan questions that allow triangulation
  - Ask the same question in different ways

Pros and Cons of Interview		
Advantages	Challenges and limitations	
Can provide more detailed information than other data collection methods, such as surveys	Can be time-intensive because of the time it takes to conduct interviews, transcribe them, and analyze the results	
May provide a more relaxed atmosphere in which to collect information through conversation, in comparison to filling out a survey	Interviewer must be appropriately trained in interviewing techniques in order to extract the most detailed and rich data from an interviewee	
Interviewee can provide firsthand and more personal knowledge of a given topic that was not anticipated by the researcher	Not generalizable; generalizations about the results are usually incapable of being made because small samples are chosen and random sampling methods are not used	
	Prone to bias; responses from interviewees (community members, program participants, etc) might be biased due to their stake in the program	

Boyce, C., Neale, P. (2006) Conducting In-depth interviews: A Guide for Designing and Conducting In-Depth Interviews for Evaluation Input, Pathfinder international, pp.1-12.

Pros and Cons of Focus Groups		
Advantages	Challenges and limitations	
Generate many ideas through dynamic discussions; "snowballing effect" can occur as participants develop ideas together	Where focus groups are conducted within an organization, participants may be concerned about confidentiality	
Bottom-up generation of concerns and issues, which can help to establish survey variables	Researcher must be highly skilled in facilitating and managing group discussions	
Can offer validity to research and avoid issues of bias in researcher's interpretation	Some participants may not speak openly and may be inhibited because of the group	
Relatively quick and efficient when compared with participant observation	Dominance by one, or some, participant(s) could limit findings relevant to the group as a whole	

Hancock, B., Windridge K, Ockleford E (2007). An Introduction to Qualitative Research, Trent RDSU.

Pros and Cons of Participant Observation		
Advantages	Challenges and limitations	
Permits access to the "backstage culture,"	Interpretation of data collected by researchers	
allows for richly detailed description of	might be skewed by the researcher's individual	
behaviours, intentions, situations, and events	interest rather than what actually happens in a	
as understood by one's informants	culture	
Provides opportunities to participate in	Understanding of the participant and what	
unscheduled events	he/she thinks is being said is limited	
Can afford the researcher the opportunity to	Researchers experience a feeling of having	
experience the real emotions and feelings of	been excluded particularly at the beginning the	
those being observed	research process	
Useful for explaining "what is going on" in a	community's discomfort with having an outsider	
specific culture and in particular social situations	may compromise the "reality" of what is being observed	
Heightens the researcher's awareness of	Interpretations of observations are subjective	
significant social processes		

DeMunck, V. C., Sobo, E. J. (Eds) (1998). Using methods in the field: a practical introduction and casebook.

Walnut Creek, CA: AltaMira Press. Kawulich, B. (2005). Participant Observation as a Data Collection Method, Forum: Qualitative Social Research, 6(2).

# In-class activity (20 min)

Work in teams

- Watch the following interview
  - ▶ https://www.youtube.com/watch?v=U4UKwd0KExc
  - ► Or, https://tinyurl.com/4ft3x9e8
- ▶ List at least 10 problems with the interview

# In-class activity (20 mins)

- Work in teams/groups
- Make a new slide for your group
- ▶ Write down group members' names
- https://tinyurl.com/pajyrb3r

# Optional Reading

- Lazar, Jonathan, Jinjuan Heidi Feng, and Harry Hochheiser. Research methods in human-computer interaction. Morgan Kaufmann, 2017.
  - ▶ Chapter 8: "Interviews and Focus Groups," Sections 8.1-8.5, 8.7-8.8
  - https://learning.oreilly.com/library/view/research-methodsin/9780128093436/?sso\_link=yes&sso\_link\_from=UMassAmherst