

# L4: Empathizing with users Interviews

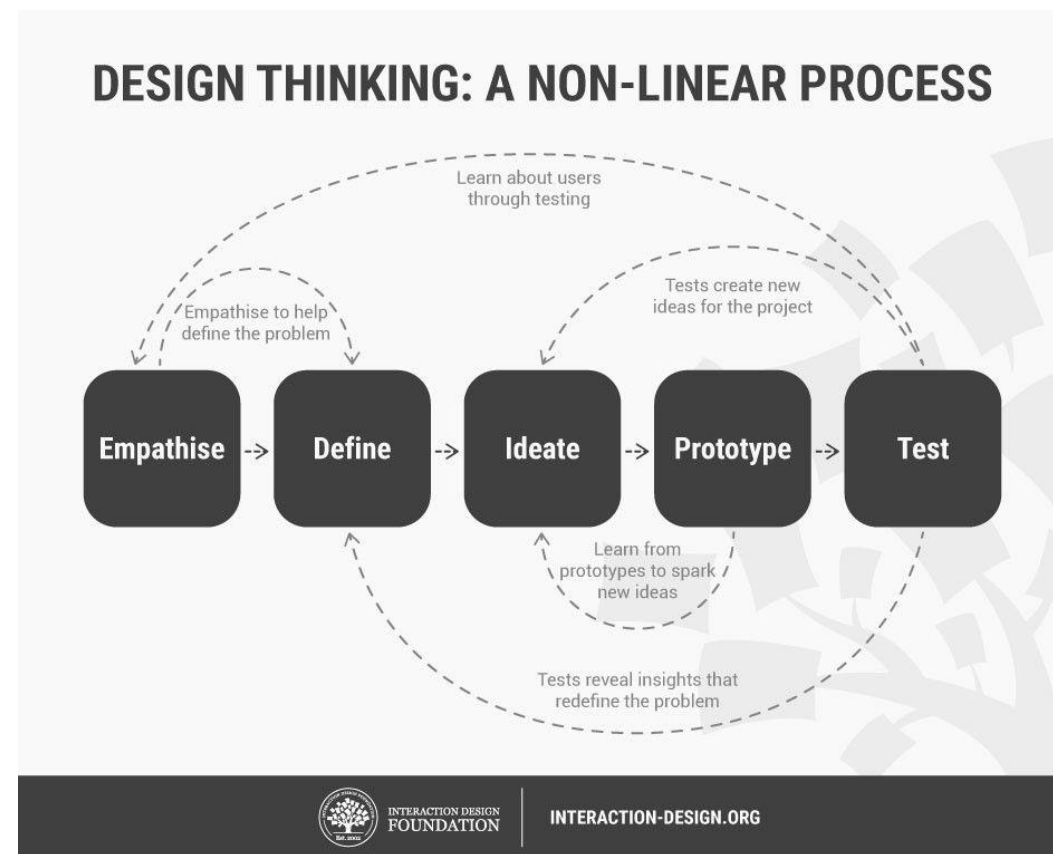
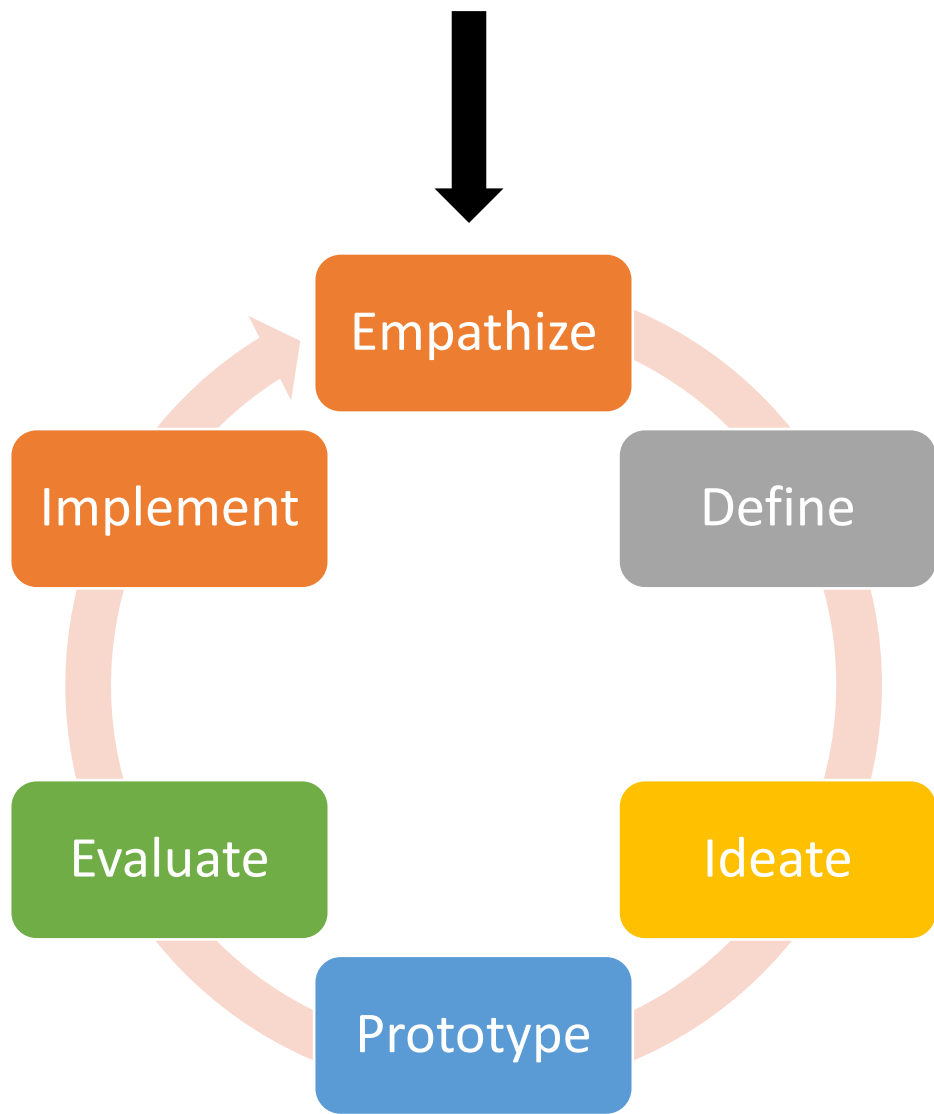
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CS798H: 2023-24 Semester-II

# Scenario

Suppose IITK wants to build an “IITK Freshman” App to help new students navigate life on IIT Campus.

- What feature(s) would you include in it?
- Why did you pick those feature(s)?
- If there's more than one feature(s), which one should we build first? Why?
- Do we even need such an app, in the first place?
- Should it be a website, or an app, or a physical handbook?



# Empathy

- Dictionary: “the ability to imagine how another person is feeling and so understand his/her mood.”
- Here, empathize is to understand the user
  - Needs, wants, challenges, attitudes, preferences, constraints, abilities, resources, etc.
- Why do we need empathy?
  - Solve real problems for users (e.g., PDS center/shop finder)
  - Solve them in a way that works (e.g., smartphone app for very poor?!)

# Empathize: How do we understand users?

- How do we go about understanding what the freshman app should have?

# Empathize / Need-finding methods

Direct  
(from existing /  
potential users)

- Interview
- Survey
- Observations
- Focus groups

Indirect  
(Other sources)

- Content analysis
- Logging / telemetry
- Contact “mentors”/security/other support staff

# Interviews

## What are interviews?

- User researcher asks questions directly to the user (or participant), and the participant responds back in real time.
- For any study/method, we must consider:
  - Population → Where do we get participants from?
  - Sample → Who are the participants (all or some)?
  - Sampling → Which ones to choose as participants?
  - Sample size → How many participants
  - Recruitment → How do we get the participants?
  - Study design → What questions to ask / topics to discuss / etc.

# For the “freshman app” need-finding:

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# For the “freshman app” need-finding:

- Population → All 800+ UG freshman and 200+ PG incoming students.
- Sample → All 1000, or a small representative group?
- Sample size → Until theoretical saturation! Typically, 10-15 for semi-structured interviews.
- Sampling → Random, purposive, stratified, convenience, snowball
- Recruitment → Emails, Flyers, social media, voluntary or not, etc.
- Study design → What questions to ask / topics to discuss / etc.

# Interview questions: some guidelines

- Ask questions that elicit details and not one words
  - Do you find difficulties navigating the campus?
  - Do you find difficulties navigating then campus, if so, which ones?
  - What difficulties do you generally find when navigating around the campus?
- Avoid generic questions that provide too many generic answers. Anchor in the truth, ask details of specific instances to get more details.
  - What difficulties do people face when navigating the campus?
  - What are some difficulties you have faced when navigating around the campus?
  - Can you tell me about a time (or the last time) you struggled finding your way around the campus, or got lost?

# Interview questions: some guidelines

- Avoid biases, and don't try to get the answer you desire. Instead, keep an open mind and seek to understand.
  - Do you think an app would help you navigate the campus?
  - What do you think would have helped you navigate around the campus?
  - What do you wish you had / institute did to help navigate around the campus?

# Structure of an interview

- Three kinds:
  - Structured → fixed set of questions
  - Semi-structured → initial set of questions, but interesting tangents followed and follow-up questions asked based on responses
  - Unstructured → no initial set of questions
- Semi-structured are the most useful in user needs elicitation

# Structure of a (semi-structured) Interview

- Greet the participant, introduce yourself, set the context of the study
  - Allows participant be mentally prepared for what's coming
- Grand-tour questions
  - Broad and easy-to-answer questions for participants to “get into the groove”
  - E.g., Tell me about yourself as an IITK student – which branch, year, hostel, etc.
  - E.g., How has the first week of the college been?
  - E.g., It's a large and beautiful campus – how are you finding it?
- Specific questions
  - Preferably, set in the context of participant already said in the previous question(s).
  - E.g., You said you're still getting used around here. Did you mean the campus, or the people, or the culture? Can you tell me more about it?
  - When unclear, ask for clarifications (examples, elaborate, did you mean X or Y, etc.)
  - Ask for follow-up questions to gather more details until you are satisfied.
  - E.g., How do you go about doing this now?, How did you find your way back to hostel?
- Closing questions
  - Is there anything else you'd like to add about... ?
- Thank the participant.

# Some other flavours of interviews

- Show and tell → interview + see some artifacts they have
  - E.g., “You said you use an app to do X. Can you show it to me and walk me through what it does and how you use it?”
- Contextual inquiry → You wait for an event to happen, and then ask questions about that event.
  - E.g., You want to know about how people react to actual emails ending up in spam. You go to participant when that happens, and then you could ask questions about that event –about contents of email, how they found, what are the consequences, why they think it got tagged as spam, etc.
- Telephonic, remote video-conference interviews happen!
- Occasionally, interviews also happen over back-and-forth emails (Recruitment across time zones, poor internet, etc.)

# Common mistakes, pitfalls and gotchas

- Do not interrupt! If you have a follow up question, make note.
- Keep an open mind, do not nudge participant to give an answer.
- Do not lead participants (don't give examples or put thoughts into their mind or words into their mouth).
- Some participants talk too much or too little – it's an art to keep it in track. Use phrases such as “Going back to...”, “You mentioned X earlier, I'd like to hear more about it.”.
- Sometimes responses to a question is already there – you could skip, or you could say “you already mentioned X, is there anything else”?

# Logistics

- Be seated in a comfortable place.
- Avoid noisy surroundings for clear hearing. Minimize distractions and interruptions to you and participant.
- Record the interview, so you don't have to bother about remembering or keeping notes.
- Keep a script of questions, track what has been asked and not.
- Write down follow-up questions to ask; that way you won't interrupt the participant's flow and won't forget to ask.
- Common to transcribe (type down) interview text verbatim.

How to analyse the interview data is a few lectures down the line!



# Limitations of interviews

- Small sample size, so findings can't be generalized to large population
- Susceptible to memory errors
- Biases in responses
  - Participants might say what you want to hear
  - Participants might fixate on most favourite, most recent, etc.
- Hard to achieve anonymity and so not suitable for taboo topics
  - E.g., use of ChatGPT for HomeWorks, or internet for cheating in homework.
- Language, cultural and personality barriers
  - Talk too much or too little, disrespectful to disagree, etc.

# Focus groups

- Like interviews, but with a group of 6-9 participants at a time.
- All in a room, with one moderator
  - Like TV panels / group discussions.
  - Often more than one group
- When:
  - Understand thought processes!
  - Bounce ideas off each other.
  - Useful to destigmatize taboo topics.
  - Compare, contrast, etc.
- Challenges:
  - Some people don't talk in groups
  - Some people might hog the conversation
  - Very hard to moderate!



# When to use focus groups?

- Typically, to understand thought processes, rather than end result.
- A website has a set of topics, you want to figure out how to organize them. You let a group of users tell us more about how they think of the content.
- You have just designed an interface, and you want to see initial reactions of a group of users and what they talk to each other about the interface.
  - In this case, you need to use this with other rigorous evaluation methods!
- Get feedback from power users / super users as a group!

# Reading

- Dix: Section 5.4
- Preece: Chapter/section on Interviews. (Different chapters in different editions, look for the right section in the table of contents).
  - (Edition 4: Section 7.4).