# Tutorial 1: Interviewing

## Human Computer Interaction

### September 29, 2017

## 1   Preparation

For this tutorial you will need to bring the following with you:

- A photograph of the inside of a refrigerator. Preferably your refrigerator, but you may photograph some other refrigerator instead. It must be a photograph you yourself took. The photo may be on your phone, laptop, or printed, but you must be able to show it to another person.

- Something to take notes with.

## 2   Introduction

Interviews are a commonly used method for identifying user needs and establishing requirements. However, interviewing isn't always as easy as it sounds there are may aspects that you can really only learn through practice. The goal of this tutorial is to get you that practice in the presence of a tutor who can help you answer questions that come up.

## 3   Research goal

All research needs a goal, without one it becomes impossible to identify what questions to ask, or what information the participant is saying is important. Some goals can be quite broad ("What does the word 'privacy' mean to different people?") and some are quite narrow ("What problems do developers have when adding TLS encryption to apps?").

Today our goal is to identify the different tasks associated with a refrigerator. Or put another way:

"What refrigerator-related tasks do people currently engage in?"

## 4   Activity (30 minutes)

Today you will be both practising interviewing and gathering some data for your first coursework. You won't be directly using this information in your coursework, but the interviews should help you think of different tasks your app could support.

You will begin by forming groups of three. Each member of the group will then assume one of three roles; Interviewer, Participant, or Recorder. The interviewer will then conduct an unstructured interview using the provided script. The participant will answer the questions posed by the interviewer, while the recorder observes and keeps notes. This task will be carried out for a total of 10 minutes, after which we will rotate the roles within the groups and move onto a semi-structured interview. Then rotate a final time and conduct the structured interview. Each member of the group should have performed each role once. We will end the tutorial with a discussion of interviews for the final 10-15 minutes.

**Interviewer**   - This person is in charge of running the interview during their 10 minute time slot. They should follow the script associated with their type of interview. Interviewers should focus on listening to the participant and asking questions, they do not need to make notes.

**Recorder** - This person is in charge of observing the interview and taking notes. They should not talk during the interview. Instead their focus is on recording the information they are observing. For a structured interview, this is fairly easy. For an unstructured and semi-structured interview the recorder has a bit more work as they must record what both the interviewer and the participant are discussing.

**Interview Participant** - This is the easiest role. The participant answers the questions posed as best they are able. There are no wrong answers and "I don't know" is a perfectly reasonable answer.

# 5  Small group discussion (10 minutes)

After all three interviews are done the tutor will tell people to switch groups. When this happens the recorder for the semi-structured interview should change groups with another student. The purpose of this switch is so that each group gets some experience talking about an interview that they did not see in person. Also, it gives each group a chance to learn about how interviews went in other groups.

The group should then discuss the question: **What kinds of tasks does a smart refrigerator need to support?**

During this discussion only evidence obtained from interviews can be used. So statements like "I use my refrigerator this way" cannot be used but statements like "My participant said they used their refrigerator this way" can be used.

# 6  Final discussion (10 minutes)

Your tutor will lead you in a final overall discussion. Potential topics of discussion are below:

- What information are you able and unable to obtain through each respective interview?

- How does the structure of the interview allow for comparison of data collected from multiple participants?

- What are examples of HCI research questions in which this interview type may be more suited, and at what stage in the project?

# 7 Unstructured interview script

**Interviewer:** You must read the following verbatim. Do not change anything except where marked. Once this part of the script is finished you can ask follow-on questions of your own choosing.

**Recorder:** Make sure you record what both the interviewer and participant are talking about. Questions are important, not just answers.

## 7.1 Read this verbatim to the participant:

Hello, my name is [your name] and today I will be interviewing you about refrigerators. This is [recorder's name] who will be taking notes with [their note taking device].

We may use some of the information you give us in our HCI coursework, but we will not use your name or any other identifying information.

Please remember that our goal today is to learn about how you use a refrigerator. There are no wrong answers.

To start, could you please show me the refrigerator photograph that I asked you to bring with you?

[Wait for photo to be produced.]

Thank you, could you please tell me about the different objects in this refrigerator and where they came from?

## 7.2 Follow-on questions

You may ask anything reasonable in this section. Please keep the following in mind when doing so:

- The participant's voice is the most important. Try and limit how much you speak.

- If the participant is quiet and you think they still have something they want to say, then do not fill the silence. Wait, and give them time to respond.

- Really listen to what they are saying. Your goal is to help them teach you about how they interact with refrigerators. Try and think of yourself as a student trying to understand a process you have never seen.

# 8 Semi-structured interview script

**Recorder:** For semi-structured interviews you should use the numbers below to help organize your notes. If the interviewer asks an important question not listed, you should record it along with the participant's response.

## 8.1 Read this verbatim to the participant:

Hello, my name is [your name] and today I will be interviewing you about refrigerators. This is [recorder's name] who will be taking notes with [their note taking device].

We may use some of the information you give us in our HCI coursework, but we will not use your name or any other identifying information.

Please remember that our goal today is to learn about how you use a refrigerator. There are no wrong answers.

## 8.2 Questions

You should ask each of the following questions to the participant in order. If a participant answers a question before you ask it, you are allowed to skip the question. You can also change the wording a bit if it makes the question easier to say or if re-phrasing is likely to help the participant better understand. It is ok if you do not get to all the questions, normally this would be important, but we have provided more questions than there is time available.

After each question you can ask a follow-on question if you want to know more about the answer. The follow-on questions are up to you. Just keep our goal in mind: "What refrigerator-related tasks do people currently engage in?"

1. What kinds of items do you normally keep in your refrigerator? It may help to use the photo of a refrigerator I asked you to bring today.

2. Tell me about the last time you wanted something that is normally kept in the refrigerator but when you opened the refrigerator it was not there?

3. Walk me through a typical shopping experience for you. What do you bring with you? What kinds of items do you look for? Do you go straight home afterwards?

4. Are you able to connect your phone to the Internet at home and when you are out shopping?

5. Have you ever had temperature issues with your current refrigerator? If so, tell me about the last time it happened.

# 9 Structured interview script

**Interviewer:** For structured interviews you must ask the questions below exactly as they are written. Do not change the wording. If the participant is confused, you can clarify the question in your own words. If the participant doesn't answer the question, you can prompt them to do so. Only ask questions on the list.

    **Recorder:** For structured interviews you may find it easier to use the numbers next to the questions below when taking notes. You only need to write down interviewer questions if they are significantly different than those listed below.

## 9.1 Read this verbatim to the participant:

Hello, my name is [your name] and today I will be interviewing you about refrigerators. This is [recorder's name] who will be taking notes with [their note taking device].

    We may use some of the information you give us in our HCI coursework, but we will not use your name or any other identifying information.

    Please remember that our goal today is to learn about how you use a refrigerator. There are no wrong answers.

    I have a set of questions on a sheet right here in front of me, and I will be asking them to you one by one.

1. How many people typically use this refrigerator?

2. In your household, who is responsible for purchasing items to put in the refrigerator?

3. Could you please show me the photograph of a refrigerator that I asked you to bring with you today?
   Thank you, could you go through the photo and list out all the items in the refrigerator? I am only looking for the item names.

4. On a scale of 1-5 where 1 is very challenging and 5 is not at all challenging, how challenging are each of the following:

   (a) Keeping your refrigerator stocked with items you use regularly.
   (b) Getting on the Internet when at home.
   (c) Getting on the Internet when out shopping for refrigerator-related items.
   (d) Using up items in your refrigerator before they spoil or pass their best-by date.
   (e) Throwing away items in your refrigerator before they spoil badly.
   (f) Remembering what refrigerator-related items you need to purchase when you are out shopping.
   (g) Keeping your refrigerator at the optimal temperature.
   (h) Deciding what items need to be refrigerated and which do not.

5. List the three items you run out of the most often.

6. When shopping do you typically bring your smart phone with you?
   (Try and get a: yes, no, or sometimes)

7. Name one other activity you do with your refrigerator that we nave not talked about today.
   (It is ok if they do not have an answer.)

8. Imagine you were to purchase a new refrigerator and were considering different options including purchasing a smart refrigerator. On a scale of 1-5 where 1 is very important and 5 is not important at all: How important are each of the following features:

   (a) Ability to see a list of the current refrigerator contents on a phone app.
   (b) Dynamic adjustment of temperature based on the current contents of a food drawer.
   (c) Ability to remotely see the current temperature of the refrigerator via an app.
   (d) Be notified on your phone when a commonly-purchased item runs low.
   (e) Be notified on your phone when the refrigerator door is open for longer than 5 minutes.