# **DRAFT Formative Research Study Instruments**

Tutorial Letter: C Group Number: 12

Group Name: Sport Lover Name: Jiachen Wan; Dongliang Wang

# Purpose:

Our goal is to have a deeper understanding of the problems that students meet when booking the badminton court and help us derive requirements for the design of novel interactive computational media that are intended to help them book badminton courts efficiently.

## **Contact Method:**

We prefer face-to-face interviews since this way can help us observe the participants in-depth. But We can also change to online or chat according to the needs of the participants.

**Interviewees:** At least 3 students who are currently facing the issue of booking badminton courts

# Recruitment plan:

Part of the interviewees will be the observers of the survey who intend to participate in a further interview. For the other part of the interviewees, we want to reach out to friends and our classmates by sending them an email or direct message. We will give the interviewees some treats like candies and small gifts. (Therese Fessenden, 2021)

**Interview place:** Online zoom or an empty interview room

# **Interview plan:**

There are two interviewers, two listeners and one interviewee in the interview room. Before the interview, we will let the participants sign the consent form.

We plan to interview the participants one by one. When we meet the interviewees, we introduce ourselves and our goal briefly to the participants. We plan to ask the participant about their day and make them feel important in our interview (Therese Fessenden, 2021). Both interviewers must speak clearly and slowly to let the participants fully understand our question(Therese Fessenden, 2021).

#### Recording the Interview:

We will ask if the participants allow us to record the interview(audio/video) as well. If the participants feel a little bit uncomfortable with the recording, we will take notes for them during the interview. In the interview, we will record the whole process of the interview and get it transcribed after getting the consent of the participants(Therese Fessenden, 2021). We will invite the other two teammates as listeners to help capture data and take notes.

#### Questions:

In our interview, we will combine open and closed questions to ask the participants. The Questions that we tend to ask in the interview:

- 1. Do you like to play badminton?
- 2. Do you prefer to play badminton indoors or outdoor?
- 3. Do you book the badminton court to play badminton?
- 4. What factors do you think will influence you most when selecting the badminton court? Why do you think that factor is essential to you?
- 5. Are there many available badminton courts near your living place? How far are the courts from your home?
- 6. Which type of approach do you usually use to you book the badminton court, like website, phone call, etc.? Which approach do you think is the most efficient way for you to book the court?
- 7. Do you have any badminton courts that you usually book? Why do you usually book that court? Does it very close to your living place? How did you book for that court? Could you access multiple ways to book that badminton court? Can you check their timetable in advance to make sure in which time slot there will be available badminton courts to book?
- 8. How often will you book the badminton court to play badminton? When do you usually book the badminton court on the weekends or weekdays? Which time slot do you usually book the badminton court? Why did you book the court at this time slot? Are there many people or few people, when you go to the badminton court? Which period of a day do you think there will be more people playing badminton? What do you do to avoid badminton peak time?
- 9. How much do you usually pay for booking a badminton court? Do you think the price is cheap, expensive or just right for you? How much are you willing to pay?
- 10. Do you find it easy or difficult to book the badminton court? Why do you think booking the badminton court is easy or difficult for you? Are there any suggestions to improve the process of booking a badminton court?

At the end of the interview, we will thank the participants and give them gifts as a reward.

#### Conclusion:

After the interview, we will conclude from the data that we collected and share the results and the recording with our teammates.

### Reference:

Nielsen Norman Group, Therese Fessenden, June 6, 2021, "5 Facilitation Mistakes to Avoid During User Interviews"

https://www.nngroup.com/articles/interview-facilitation-mistakes/ (Links to an external site.)

# **Research Protocol**

- 1. **Project Title**: Helping students find badminton courts efficiently
- 2. **Investigators**: Dongliang Wang: <u>Dongliangw.wang@mail.utoronto.ca</u>

  Jiachen Wan: jiachenw.wan@mail.utoronto.ca
- 3. **Purpose**: The purpose of our research is to learn the problems that students face when booking the badminton courts to help us derive requirements for the design of novel interactive computational media that are intended to be useful to students who find it hard to find a badminton court. Our design concept briefly describes: Help the students quickly and efficiently book the badminton court.
- 4. **Process to be followed**: We will brief the participants about the purpose of the study, explain the consent form to them, and ensure that they sign the consent form. We will then engage the participants in a 15-minutes interview.
- 5. **Participant selection:** Participants will be chosen from students. They will be identified via where they are and selected according to their own will. In general, they will be characterized by age and the type of sport.
- 6. **Relationships**: Our relationship with the participants may be described as follows: Some participants are friends and others have no relation with us.
- 7. **Risk and benefit:** There will be minimal risk to the participants, for example, that they feel that they have wasted their time. The only benefit will be to contribute to the education of the investigators. Participants are free to withdraw before or at any time during the study without the need to give any explanation.
- 8. **Consent details**: We will brief the participants about the purpose of the study, explain the **attached consent form** to them, and ensure that they consent to participate and sign the consent form.
- 9. **Compensation**: Participants will receive no compensation.
- 10. **Information sought:** The information to be sought is described in the attached draft formative study instruments.
- 11. **Confidentiality**: Information will be kept confidential by the investigators. Names or other identifying or identified information will not be kept with the data. The only other use will be to include excerpts or copies in the assignment submitted, but names and other identifying or identified information will not be submitted.

# Consent Form: Interview of helping students find badminton courts efficiently

I hereby consent to participate in a research study conducted by Jiachen Wan and Dongliang Wang for an assignment in the University of Toronto Computer Science course CSC318 The Design of Interactive Computational Media.

I agree to participate in this study the purpose of which is to help students find badminton courts efficiently the design of novel interactive computational media.

I understand that

- The procedures to be used are interviews.
- · I will receive no compensation for my participation.
- · I am free to withdraw before or at any time during the study without the need to give any explanation.
- · All materials and results will be kept confidential, and, in particular, my name and any identifying or identified information will not be associated with the data.
- The process of the interview will be recorded and transcribed.

PARTICIPANT		
Name (please print)		
Signature		
Date		
INVESTIGATORS		
Name	Signature	
Name	Signature	

# **Appendix 1:** DRAFT Formative Research Study Instruments

**Student Name: Dongliang Wang** 

#### Goals:

We want to know about the problems students have when they book the badminton courts. The interview questions will guide us to understand deeply the problem that students meet in booking badminton courts.

# Recruitment plan:

We want to interview students at the university. We want to recruit from friends, which is the most convenient way. Also, we could talk with students in the University and ask them if they can help us with the interview about badminton.

#### Research Plan:

We will introduce ourselves to the participants and explain the goals of the interview.

#### Method:

We prefer face-to-face interviews since this way can help us observe the participants in-depth. But We can also change to phone or chat according to the needs of the participants.

# Recording the Interview:

We hope to take audio recordings when we have interviews with the participants. This requires consent from the participants. If If the participants reject us, we will take notes when we are interviewed.

## Types of questions:

We will have 2 closed questions and 10 open questions. Closed questions could help us to identify the participants and the open question can show participants' difficulties clearly.

#### Questions:

Since we focus on the students who meet problems when they book a badminton court, the first question is:

- 1. Do you play badminton?
- 2. Do you book a court when you play badminton?
- 3. How often do you play badminton?
- 4. How often do you book a badminton court?
- 5. When do you usually play badminton? Is the court available at this time?
- 6. How did you book a badminton court?
- 7. What problems do you have booking badminton courts?
- 8. Is it difficult or easy to book a badminton court?
- 9. Where did you book the course? Are you near home? How far is it from home?
- 10. How many badminton courts have you booked? Which one do you like best? Why is that?

We will have an interview with at least 3 participants.

Student Name: Jiachen Wan

**Purpose:** Our goal is to have a deeper understanding of the problems that students meet when booking the badminton court and help us derive requirements for the design of novel interactive computational media that are intended to help them book badminton courts efficiently.

**Contact Method:** Face to face (Online/in-person)

**Interviewees:** 5~10 students who are currently facing the issue of booking badminton courts

**Recruitment plan:** Part of the interviewees will be the observers of the survey who intend to participate in a further interview. For the other part of interviewers, we want to reach out to friends and our classmates by sending them an email or direct message. We will give the interviewees some treats like candies and small gifts. (Therese Fessenden, 2021)

**Interview place:** Online zoom or an empty interview room

# Interview plan:

There are two interviewers, two listeners and one participant in the interview room. When we meet the interviewees, we introduce ourselves and our goal briefly to the participants. We will ask participants about their day and make them feel important in our interview (Therese Fessenden, 2021). We will also ask if the participants allow us to record the interview. Both interviewers must speak clearly and slowly to let the participants fully understand our question.

In our interview, we will combine open and closed questions to ask the participants.

The Questions that we tend to ask in the interview:

- 1. Do you like to play badminton?
- 2. Do you prefer to play badminton indoors or outdoor?
- 3. Do you book the badminton court to play badminton?
- 4. Are there many available badminton courts near your living place?
- 5. How often will you book the badminton court to play badminton, do you find it difficult to book the badminton court?
- 6. What challenges do you meet when you book the badminton court?
- 7. Why do you think the difficulty will be the challenge for you to book the badminton courts? (The participants can answer this question by combining their personal life.)
- 8. Is there any suggestion to help you book the badminton courts efficiently?

During the interview, we will record the whole process of the interview and get it transcribed after getting the consent of the participants (Therese Fessenden, 2021) We will invite other two teammates as listeners to help capture data. At the end of the interview, we will thank the participants and give them gifts as a reward.

After the interview, we will make the conclusion from the data that we collected and share the results and the recording with our teammates.

#### Reference:

Nielsen Norman Group, Therese Fessenden, June 6, 2021, "5 Facilitation Mistakes to Avoid During User Interviews"

https://www.nngroup.com/articles/interview-facilitation-mistakes/ (Links to an external site

# **Appendix 2:** A2a.Draft Study Instruments

Tutorial Letter: C Group Number: 12

Group Name: Sport Lover Name: Jiachen Wan; Dongliang Wang

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# Recording the Interview:

We will also ask if the participants allow us to record the interview(audio/video). During the interview, we will record the whole process of the interview and get it transcribed after getting the consent of the participants by signing the consent form(Therese Fessenden, 2021). We will invite other two teammates as listeners to help capture data and take notes if the participants do not consent to be recorded.

#### Questions:

In our interview, we will combine open and closed questions to ask the participants. The Questions that we tend to ask in the interview:

1. Do you like to play badminton?

- 2. Do you prefer to play badminton indoors or outdoor?
- 3. Do you book the badminton court to play badminton?
- 4. Are there many available badminton courts near your living place? How far are the courts from your home?
- 5. How often will you book the badminton court to play badminton, do you find it easy or difficult to book the badminton court?
- 6. What challenges do you meet when you book the badminton court?
- 7. Why do you think the difficulty will be the challenge for you to book the badminton courts? (The participants can answer this question by combining their personal life.)
- 8. Is there any suggestion to help you book the badminton courts efficiently?
- 9. Could you remember how many badminton courts you booked? Which one do you like best? Why is that?

At the end of the interview, we will thank the participants and give them gifts as a reward.

#### Conclusion:

After the interview, we will conclude from the data that we collected and share the results and the recording with our teammates.

## Reference:

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