# **Project Installment 4: Data Collection**

**1. (Team portion)** Provide the items below, and explain:

| *1. Research questions and Propositions* | RQ: What kind of challenges are CS students facing while collaborating remotely on research work during COVID?  1) What are the various channels and tools via which CS students facilitate remote collaborative research? Tools and channels for remote collab  2) How has remote work been affected by remote collaborative meetings? meeting |
| --- | --- |
| *2. Units of analysis.* | The meetings itself, The encountered problems, Tools themselves, CS students |
| *3. Data to collect.* | Data:  1) Observations during meetings regarding what tools these CS students use and what challenges they face.  -a) What new tools are being used for remote collaboration and how are they affecting research work?  -b) Misunderstandings / Repetition of explanation  -c) Body language if cameras are on  -d) Intonation  -e) Features of tools being used (e.g., Zoom share screen.)  2) Semi-structured Interview regarding meetings |
| *4. Collect most of that data* | Raw data:  Two observations:  [Observation 1](https://drive.google.com/file/d/1brZCYWW96IZvUyxTMTzgn30yYjSEK0MB/view?usp=sharing), [Swetha\_observation on Evie.pdf](https://drive.google.com/file/d/1zErAcj2RHl8SVRrjPM-SkgpM1StnZHQW/view?usp=sharing) :  Data 1) a, b, d, e  [Observation 2a](https://drive.google.com/file/d/1zOQIWCVIF319deFNQrRNACmzxSRiFnW6/view?usp=sharing) :  Data 1) a, b, c, d, e  [Observation 2b](https://drive.google.com/file/d/1pxOQ8a4_pbRxnrOth2Mb3Azy-E1F6kaG/view?usp=sharing):  Data 1) a, b, c, d, e  Two interviews  Link to interview 1: [GMT20210207-025700\_Qingxiao-Y\_640x360.mp4](https://drive.google.com/file/d/1s6Pc1l5MabrQsEMGxhidA1WMUWXNSXa8/view?usp=sharing)  Data 2)  Link to interview 2: [Interview 2](https://drive.google.com/file/d/1RqjkwDZcf009avDmEA4YrnDXSqVMczYD/view?usp=sharing), [Swetha\_on\_Vaishnavi Interview.pdf](https://drive.google.com/file/d/1SRDUFb6-s4xYj8OLHJp3wVMbDAM8lwHf/view?usp=sharing)  Data 2)  Also please find the observation notes below this document. |

**Qingxiao Yuan’s observation note from “Amreeta + Evie (Done- February 3rd)”:**

Observation for Evie May starts from around 10.03am.

The software they use are Atlas.ti and zoom. The meeting topic was design discussion.

Keep eyes on the screen, but have a hesitating start for the meeting.

Brown hair, wear glasses.

At 10.03am, scratch head, //seems like confusing.

American English accent, lift her cheek// seems like consider sth.

Staring at the screen, frowning, then having an ask, when answered, said “ok”//looks comfortable, seen from eyebrow.

Concentrate, drink tea/coffee // she looks easier now

Continuing lifting her cheek // listening negatively.

10.09am, yawing, looks sleepy eyes, then holding on her eyeglasses at 10.10am.

At 10.11am, began actively talking, her tone heard easily and comfortably. Many “Ok”.

At 10.12am, she smiled //looked satisfied with the result.

At 10.13am, drink twice. Then she asked the “data sorting” problem in their project. When heard the explanation, accept “yes” for the clarification. Then, lift her cheek again.

At 10.15am, supported her cheek with left hand, read the project text. Looks relaxed.

At 10.17am, stroking her hair, looks sorting out the project. Then, supported her cheek with right hand again.

At 10.18am, sit a little forward to the screen, and offer advice. // seems like more concentration.

At 10.19am, played her hairs, said “Nice” about the projects.

At 10.23. supported her cheek with left hand again.// looks like negative listening.

**Delyar Tabatabai’s observation note from “Amreeta + Evie (Done- February 3rd)”:**

**Amreeta: Am**

**Evie: E**

* Evie didn’t have her camera on at first, Amreeta asked her to turn it on.
* Evie seems like a native american girl because of her accent and her hair color which is blonde. She is wearing stylish statement glasses with an OSU sweater. She has a Canvas stand in her room so she seems to be a painter.
* Amreeta shares her screen and opens up the overleaf tool and opens a research paper. She asks Evie to check references. Amreeta describes a figure to E.
* E seems like she is concentrating on the paper.
* Am keeps asking E to check the paper.
* E takes her time to read the paper. She is not able to see the picture clearly so she asks Am to zoom on it. E says that the outline is weird and Am responds: “even when you zoom in? Download the pdf it will be fine”
* E and Am both talk what they are reading loudly. I guess this is because telling the other person that they are currently reading.
* Am describes that she did action coding. E doesn’t know what action coding is.
* Am opens up a software (code manager I guess)
* E and Am are both drinking coffee because the meeting is in the morning and they both do a lot of yawning, especially E.
* Am talks more than E. Am shares the screen and shows an excel file and asks E to do something with that data about emails. E says that she is not very skilled with excel but she’ll manage to google things. E asks Am to explain some columns of the excel sheet.
* Am seems like a very good manager and has many software tools for their project. She opens a software (Mailing list rtf)
* Both seem like they are concentrating to read the email texts and categorize them. They discuss the categories and assign categories to emails. Am keeps asking E’s opinions about everything. She seems like she wants E to participate in the job.
* E seems to get really bored of coding these email texts and keeps yawning. E is now lying on her desk so I can only see her barely. Am checks documentations sometimes when she is not sure about sth. Am seems to be getting bored as well, she is now lying on a couch and puts her laptop on her feet.
* They seem like they are both comfortable with each other and having their cameras on.
* I think they are using a tool called (Atlas.ti)
* E puts her hand under her chin like she is very bored and tired.
* Am is busy reading the context while E is making guesses about emails’ categories.
* It is interesting that they both have cute string lights in their rooms and they both have turned it on.
* \* They had a 5 min break in their 2 hour conversation and they came back at 11:05. Now Am is sitting in front of her desk and yawns once in a while. Evie looks sharper now and still drinks coffee.
* E corrects Am’s guess and after some thinking Am admits that E is right.

**Swetha Jayapathy’s observation note from “Amreeta + Evie (Done- February 3rd)”:**

**Observations on Evie**

* There are two people in the meeting - Amreetha & Evie.
* Evie wears a white t-shirt with round spectacle and looks calm.
* Initially Evie turned on her camera on request
* Amreetha shares the screen and evie finds it difficult to read as the font size is smaller, so she comes closer to the screen to read.
* Amreetha shares the screen via zoom and explains while Evie listens to her and answers a few doubts which Amreetha has.
* Evie keeps her hand often on her forehead and reads the paper, which looks like an effort being made to read.
* Evie says that she couldn’t read the paper as it looks blurry and Amreetha asks her to download the paper and view it.
* Amreetha stopped sharing while Evie downloaded the paper by herself and read it.
* Evie still couldn’t see a clear image from the paper.
* Evie drinks coffee and listens to Amreeth’s explanation of coding.
* Evie asks a few doubts for which Amreetha answers.
* Amreetha and Evie then start collaborating through excel sheets.
* Evie says that she is not that familiar with excel and that she only knows some basics.
* Amreetha starts explaining and Evie gives an expression trying to understand and she clarifies her doubt at times.
* Evie listens and Amreetha shares her screen.
* Both of them read some coding stuff.
* Evie keeps her hand on her forehead trying to understand the reading content.
* Amreetha and Evie exchange their understanding on the coding stuff.
* Evie plays with her hair while listening to what Amreetha says and she looks confused.
* Amreetha asks a question and Evie answers it with doubt.
* Evie listens while Amreetha goes through the content (ten minutes).
* Evie keeps her hand on her cheek and goes through the material in depth.
* At 10.30am, Evie comes closer to the screen and reads.
* Evie looks like she is thinking deeply.
* Evie yawns and asks a few questions.
* Evie seems a little exhausted, she looks like she is confused or does not understand.
* They both try to understand.
* Evie keeps both of her hands on her cheek and rests her head.
* Evie takes coffee often and looks keen into the screen.
* Evie yawns and goes through the material.
* At 10.40am, Evie looks at her mobile for a minute and then she is back to her reading.
* Evie rests her head on one of her hands and keeps reading.
* At 10.43 am, Evie comes closer to the screen and continues reading.
* Evie changes her posture often and reads.

**Amreeta’s observation note from V meeting (Done- February 5th):**

[3:06 PM, 2/5/2021] Amreeta: They are making a questionnaire

[3:06 PM, 2/5/2021] Amreeta: no next line feature for google form

[3:07 PM, 2/5/2021] Amreeta: only david and vayra talking

[3:07 PM, 2/5/2021] Amreeta: Jeff chimes in with a confusion

[3:10 PM, 2/5/2021] Amreeta: vaishnavi is doing things sharing screen

[3:10 PM, 2/5/2021] Amreeta: so she is the one running into issues

[3:10 PM, 2/5/2021] Amreeta: can’t copy a question

[3:12 PM, 2/5/2021] Amreeta: Yash talks

[3:12 PM, 2/5/2021] Amreeta: brings up a concern

[3:16 PM, 2/5/2021] Amreeta: working on google forms

[3:16 PM, 2/5/2021] Amreeta: V is talking while working

[3:16 PM, 2/5/2021] Amreeta: And also clarifying for everyone else

[3:17 PM, 2/5/2021] Amreeta: she is wondering if it’s a personal question

[3:17 PM, 2/5/2021] Amreeta: she talks to herself to fill up the silence

[3:17 PM, 2/5/2021] Amreeta: nobody is muted

[3:17 PM, 2/5/2021] Amreeta: but they are all silent

[3:17 PM, 2/5/2021] Amreeta: she thinks aloud

[3:17 PM, 2/5/2021] Amreeta: someone’s phone rings

[3:18 PM, 2/5/2021] Amreeta: One member says he will be right back

[3:18 PM, 2/5/2021] Amreeta: but don’t interrupt

[3:18 PM, 2/5/2021] Amreeta: while discussing one question everyone chimes in

[3:19 PM, 2/5/2021] Amreeta: google forms does something weird

[3:19 PM, 2/5/2021] Amreeta: V loses it

[3:19 PM, 2/5/2021] Amreeta: And says crap

[3:19 PM, 2/5/2021] Amreeta: she is frustrated with them

[3:19 PM, 2/5/2021] Amreeta: Yash is back

[3:20 PM, 2/5/2021] Amreeta: and asks why is this even a MCQ

[3:21 PM, 2/5/2021] Amreeta: Everyone is participating now

[3:21 PM, 2/5/2021] Amreeta: trying to fix english

[3:21 PM, 2/5/2021] Amreeta: Everyone stops participating again

[3:23 PM, 2/5/2021] Amreeta: Yash and V are talking about why it’s an important question

[3:24 PM, 2/5/2021] Amreeta: canvas course... Can’t check grade

[3:25 PM, 2/5/2021] Amreeta: They have various experiences

[3:26 PM, 2/5/2021] Amreeta: someone said something which people didn’t understand

[3:26 PM, 2/5/2021] Amreeta: she didn’t repeat

[3:26 PM, 2/5/2021] Amreeta: or didn’t understand

[3:29 PM, 2/5/2021] Amreeta: david isn’t participating

[3:29 PM, 2/5/2021] Amreeta: no enter button

[3:29 PM, 2/5/2021] Amreeta: control enter

[3:29 PM, 2/5/2021] Amreeta: shift enter

[3:29 PM, 2/5/2021] Amreeta: not working

[3:30 PM, 2/5/2021] Amreeta: the line looks ugly

[3:30 PM, 2/5/2021] Amreeta: yash is guiding

[3:31 PM, 2/5/2021] Amreeta: V is confused and probably doesn’t agree

[3:31 PM, 2/5/2021] Amreeta: but it’s hard to see

[3:31 PM, 2/5/2021] Amreeta: Ok she asks a question after some time

[3:31 PM, 2/5/2021] Amreeta: she agrees

[3:31 PM, 2/5/2021] Amreeta: someone said something but they don’t know who

[3:32 PM, 2/5/2021] Amreeta: V asks a question and answers it herself

[3:32 PM, 2/5/2021] Amreeta: She says qualtrics is much better

[3:33 PM, 2/5/2021] Amreeta: doesn’t wait for people’s opinion

[3:33 PM, 2/5/2021] Amreeta: someone’s typing something

[3:33 PM, 2/5/2021] Amreeta: but nobody can see what

[3:35 PM, 2/5/2021] Amreeta: starting something new

[3:36 PM, 2/5/2021] Amreeta: nobody participates

[3:36 PM, 2/5/2021] Amreeta: V says “hello”

[3:36 PM, 2/5/2021] Amreeta: she doesn’t know if people are still here

[3:37 PM, 2/5/2021] Amreeta: she talks while writing

[3:37 PM, 2/5/2021] Amreeta: V is leading the meeting/conversation

[3:37 PM, 2/5/2021] Amreeta: using google docs

[3:37 PM, 2/5/2021] Amreeta: others say yeah

[3:37 PM, 2/5/2021] Amreeta: Y brings a point

[3:37 PM, 2/5/2021] Amreeta: V has an issue

[3:38 PM, 2/5/2021] Amreeta: She isn’t sure if she wants to incorporate Y’s idea

[3:38 PM, 2/5/2021] Amreeta: again people are silent

[3:39 PM, 2/5/2021] Amreeta: they aren’t chiming in unless V asks something to everyone

[3:40 PM, 2/5/2021] Amreeta: She asks something

[3:40 PM, 2/5/2021] Amreeta: when people say nothing

[3:40 PM, 2/5/2021] Amreeta: She starts explaining it

[3:40 PM, 2/5/2021] Amreeta: to fill the silence

[3:40 PM, 2/5/2021] Amreeta: one by one they are giving ideas

[3:43 PM, 2/5/2021] Amreeta: they disagree on a lot of things

[3:43 PM, 2/5/2021] Amreeta: V wants someone to do it

[3:43 PM, 2/5/2021] Amreeta: but wants to include details

[3:44 PM, 2/5/2021] Amreeta: V tells them how to send the email

[3:44 PM, 2/5/2021] Amreeta: she is the group leader

[3:44 PM, 2/5/2021] Amreeta: and has to bring everyone together

[3:45 PM, 2/5/2021] Amreeta: Jeff’s idea didn’t get added

[3:45 PM, 2/5/2021] Amreeta: but nobody can see if he is ok

[3:46 PM, 2/5/2021] Amreeta: but he says he is okay with it

[3:46 PM, 2/5/2021] Amreeta: She is looking for a question

[3:49 PM, 2/5/2021] Amreeta: she is the only one writing

[3:49 PM, 2/5/2021] Amreeta: I wonder what others are doing during this time

[3:49 PM, 2/5/2021] Amreeta: are they distracted?

[3:50 PM, 2/5/2021] Amreeta: V knows things

[3:50 PM, 2/5/2021] Amreeta: People are clarifying with her

[3:55 PM, 2/5/2021] Amreeta: she asks someone to read

[3:55 PM, 2/5/2021] Amreeta: write\*

[3:55 PM, 2/5/2021] Amreeta: One member mutes herself

[3:55 PM, 2/5/2021] Amreeta: it’s near the end of the meeting

[3:56 PM, 2/5/2021] Amreeta: all 5 people are on the doc

[3:56 PM, 2/5/2021] Amreeta: but they don’t make changes without mentioning it

[3:57 PM, 2/5/2021] Amreeta: V says ok sure

[3:57 PM, 2/5/2021] Amreeta: I wonder if this happens for each meeting

[3:57 PM, 2/5/2021] Amreeta: she says sorry for her keyboard being loud

[3:58 PM, 2/5/2021] Amreeta: But i think it’s to get rid of the silence

[3:58 PM, 2/5/2021] Amreeta: complains about a lot of work

[3:58 PM, 2/5/2021] Amreeta: schedules next meeting

**Delyar’s observation note from V meeting (Done- February 5th):**

**Vai = vaishnavi, vayra**

* The meeting is in Discord and they are 5 people and all of them have their cameras turned off. (Vayra David, Jeff, Shen, Yash)
* Vai is sharing her screen showing some google forms document and they are designing some questions for a survey. Vay seems to be the leader of the group because she is the most active person among them. Talks more than others and types.
* Vai says sth and everyone is quiet. Vai: “Hello?”
* The quality of Yash’s voice is not good and I cannot hear her well.
* David’s phone rang (heard the ring voice from his mic) → Vai: “It was so loud!”
* Yash: types “Brb” in the chat and comes back after 2 minutes.
* Vai is typing out questions in the google forms and says: “Man! I hate this” (enter is not working)
* Yash: types in the chat → “Guys!! Got a problem with my network”
* Vai: “Jump in the interviews, it’s gonna take time”
* I can hear the sound of their typing because it is very loud through their mics.
* Vai talks about her ideas and gets no response from others and says again : “Hello?”
* I hear people talking at the same time so their voices get mixed.
* Vai: “I’m sorry my keyboard is so loud”
* They are also using google docs.

**Delyar’s observation note from Amreeta and Vaishnavi’s interview(Done- February 8th):**

\*Why do you use discord?

- i've been using discord for a long time. I had to shift from discord and it was a hassle. Everyone had discord and prefered them because it's popular and most people use it. zoom is easy too. in discord you just have to hop in a general channel and it's easy.

\* we saw you using google forms and google docs. What tools do you think helps a meeting?

- i mentioned this before. anytime having group projects we have google docs. having sth to put all information is needed. We mostly use Google products. i like to share my screen because I don't want shifting between pages and I want to share screen so others don't ask where are you now.

\* when you were using google forms you said ? is easy what do you think?

- ? has more options than google form. ive been using it for the past week and I think not everyone uses it. It is a very bad collaborative experience. you rather have a google form.

\*Meeting dynamics, how much time did you spend on collaborative meetings overall last week? (you)

- it depends heavily on which weeks it is . sometimes 8-9 hours sometimes 1 hr. last week: i would say 4-5 hrs. I can check my calendar. yeah 4-5 hrs.

\* identify 2 meetings, one which maximum people worked and do you think about these meetings happening efficiently?

- what do you mean as a collaborative team? I do have two meetings in my mind. example of last before week. a lot of meetings were cancelled and were not usually expected. i don't know what was happening last week.it was weird all the meetings were pushed to weekend. 2 vs 5? maximum people were 2 other people but recently my advisor has gp meeting with 4 people. mostly my meetings are with 1 person and we share a google docs. one meeting is in facetime she is not is osu. we cancelled zoom because it was zoom fatigue because we got tired of using zoom all the time. We do this over the phone. She has launched and is more friendly. When we want to finalize the meeting I'll go to the desktop and she adds sth and tells which page number(facetime and google docs). For research projects we use zoom. The meeting id doesn't change because I am the host. mostly i use the same meeting id and everyone joins. I worked 7-8 hours with 1 person in a day to work because of the deadline. I use my personal meeting id for everything. I hardly schedule meetings.

\* Do you usually use facetime?

- we did have a facetime group with one member but shifted it to discord. also shifted a whatsapp group to discord because it is more formal.

\* Why did you shift?

- i would say it's more visible. you can keep track of things and see who is online. On the phone it's always like texting. I would send more messages in discord rather than text. I see people are online and playing games or listening to music and not answering me on discord and it's frustrating. it happens a lot when people do not collaborate on discord and are online.

\* having people not have their videos on do you make them distracted?

- in most meetings we don't use videos. I don't want to see s.o's face for 7 hours. We used to share a screen. depends on the kind of meeting. We use video for 1-1 meetings with my advisor.if all people are accountable it is not necessary to turn on their video. If it's a personal chat I prefer seeing their faces.

I think collaboration works a lot when it is online and people dont bring excuses. you know when you are available and don't bring excuses. i don't think every meeting needs to be in person. Most meetings are fine online.

\* Do you feel individuals contribute as much as they contribute as in in person meetings?

- online people contribute more based on my previous experience. it all depends what kind of team members they are. A team environment is important. The execution time is shortened and I have easy access to materials online. Everyone has equal resources and is inclusive. it's the best kind of collaboration. In person we use like conference rooms and others are waiting. Sometimes people talk alot and dont give others a chance to talk. if in zoom s.o talks a lot, other people can write text without interrupting him. a lot of things are good online. people take the time to process in online meetings and don't insult.

\* Is there anything specific that you want to share?

-i took a class last term one of the team members dropped out from meetings. most people had 4 people and we were 3 because the teammate didn't respond and others worked more. I had to ping them that we have an assignment. I saw people online and not responding. week 7 things went very bad. it was also with undergrads and they have different priorities in life. they don't put the same level of effort.

**Qingxiao’s observation note from Amreeta and Vaishnavi’s interview(Done- February 8th):**

1.tools: google sheet not frequently used

2.time: not sure, since not track.

Overall:4-5 hours last week.

3.meeting cancel feelings?

Everyone may have their reason, weird.

4.share ideas with google doc.

Difference: Facetime with friend: since just talk, free. 10’16;

zoom: use personal meeting id. 6-7 hours with a person since in different projects.

Discard: just communicate time.

Whatsapp: “shift to discard”.

5.Q8: not a big difference. Depends on person. Online is better, since the execute time becomes shorter.