Human-Computer Interaction
Exercise sheet 2
Project 1 - Establish requirements

Team members:

1. Ankit Agrawal (2581532)
2. Janaki Viswanathan (2581499)
3. Rameen Ghafoor (7000933)

Task 1

part a

The stakeholders of our project are listed below:

Students:
Students are primary users as they will be directly affected by the use of our product. They are frequent users and will have hands-on experience with the product.

Tenured faculty members: are full-time professors. They are also primary and frequent users. And they will be directly interacting with our product to give online lectures and perform other relevant tasks.

Dean: Leads the faculty of the particular department, and set academic policies within a university. This is the secondary user as they are indirectly affected by the experience of (primary users) faculty. A dean can also be a professor. So we can say that they interact with the product directly and indirectly.

President/chancellor: This is a tertiary user of the product. They do not use the product directly, but the outcomes of the product indirectly affect them. They are responsible for ensuring that the right decisions are made with respect to system scope and that the original objectives of the project are met. Mainly this user will be making the decision to purchase this product.

Developers: This is not the user of the product because they do not suffer from the problem for which they are building a solution for but will be affected by the product success.

Working Students: are also primary users of the product. They are part-time employees, but they also have to complete their courses, and for that, they need to interact frequently with the product.

Part b

Persona 1

Persona Group	Master's Student
Photo	
Fictional Name	Emily Cooper
Job Title	1st semester student of masters in Media Informatics
Demographics	Age: 24 Location: Saarbrücken, Germany Status: Single Education: B.Sc. Computer Science
Goals and Tasks	• Working hard and being punctual are her top priorities. • Understanding the concepts taught in the lectures. A better understanding would result in better grades in assignments. • Making notes in each lecture and compile them by the end to study for the exam. • Solving weekly exercise for practice and share them with tutors.

	• Working on given feedback on exercises.
	• Looking for answers on the discussion forum or ask the tutor personally.
Environment	Emily is comfortable with her computer use, but she does not like too much screen time. The nature of her program requires a lot of computer use, and she sits in front of her laptop from 8 am to 4 pm to attend her online classes and sometimes gives extra hours to studies when there is any assignment due. She is also active on her social accounts but mostly focuses on her studies. She lacks confidence when she has to learn to use a new web or mobile app and requires IT support which is not really available to her. She uses MS Teams and Gmail on a daily basis. She has a TP-Link WIFI connection in her dormitory. She lives in a single room apartment and works in a peaceful environment.
Challenges	• The increase in Emily's screen time has caused too much strain on her eyes.
	• She struggles to focus during online classes.
	• She prefers the more interactive and immersive experience that involves more learning and less screen time.
	• It is not possible to reach tutors and group members unless they are online.
	• Emily is shy to ask questions in front of everybody.
Quote	*"Whenever I have questions, my social anxiety kicks in"*

Persona 2

Persona Group	**Working Student**
Photo	
Fictional Name	David Rose
Job Title	Masterarbeit, working on master thesis with Daimler-Protics
Demographics	Age: 25 Location: Saarbrücken, Germany Status: Single Education: 4th Semester student of Masters in Computer Science
Goals and Tasks	• Performing well in assignments and qualify for exams and complete thesis experimentation as soon as possible. • Complete all the courses this semester and manage weekly thesis tasks.
Environment	David considers himself an expert user of computers and overall technology. He has a strong educational and professional background in computer sciences. He works 30 hours per week and manages his course work side by side. The nature of his work and education requires extensive and frequent use of a laptop. However, when a problem arises, he finds his answers on Google. David is not active on social networks. He is not very social and only interacts with people at work or study groups if need be. He lives and works at a shared apartment which is sometimes noisy. He uses a private Internet connection.
Challenges	The course related assignments, lectures and new announcements are all over the place. Every course has a different medium for interacting and sharing files. With thesis work, it is difficult to keep tabs on each and every activity that goes on different channels of every course. It is easy to miss important points.
Quote	*"I am looking forward to finishing my master's program this year"*

Persona 3

Persona Group	**Professor**

Photo		
Fictional Name	Prof. Dr. Maya Henry	
Job Title	A professor of statistics in the Informatics Department	
Demographics	Age: 38 Location: Munich, Germany Status: Married Family: Mother of 7-year-old son Education: Doctorate at the School of Informatics	
Goals and Tasks	• To deliver meaningful and rigorous instructions seamlessly. • To plan the lecture and incorporate all the materials required for the lecture. • Keeping a schedule helps to maintain the work-life balance. • Cover the target topics in a specified time period. • Answer student's questions properly and keep them motivated about course work and assignments .	
Environment	Maya considers herself as an intermediate user of computers and technology. She is not a confident user and never uses it casually. She spends 8 hours teaching. She also has to work extra hours for preparing lecture material and attending to her students' requests and queries while her son sleeps after dinner. She has a stable WIFI connection in her home. She checks her inbox frequently to reply to her students' concerns. Maya has started to use MS Teams frequently now, but she finds it difficult to use and also it does not facilitate all her needs. Maya used to be active on social networks, but now she has lost touch due to work-life imbalance. Her environment is sometimes noisy and distracting because her son is also attending classes from home.	
Challenges	• Hard to switch between the roles when working from home. • Have to frequently check inbox. University wants to accommodate international students, especially, which requires constant guidance available from the lecturer at all times. These students feel left out (not being able to attend university life etc.,) and have lower confidence level when sharing their ideas online in front of the audience. Hence, sending emails is their own way of having a one-to-one conversation which they find comforting. Some students sent depressing emails that they are giving up, and feeling lost. On a personal level, Maya felt obligated to reach back to thesestudents because as a teacher, it's her responsibility to make sure they don't do anything unwise (like self-harm). • It is difficult to work with distractions around. • To make the experience seamless, planning is required, which is time-consuming. • It is impossible to read body language and make eye contact through a computer screen. • Hard to connect with other teachers and share resources.	
Quote	*"When teaching online, I have to be available to students 24/7. With the international cohort, I would get emails at midnight or after working hours (9-5)."*	

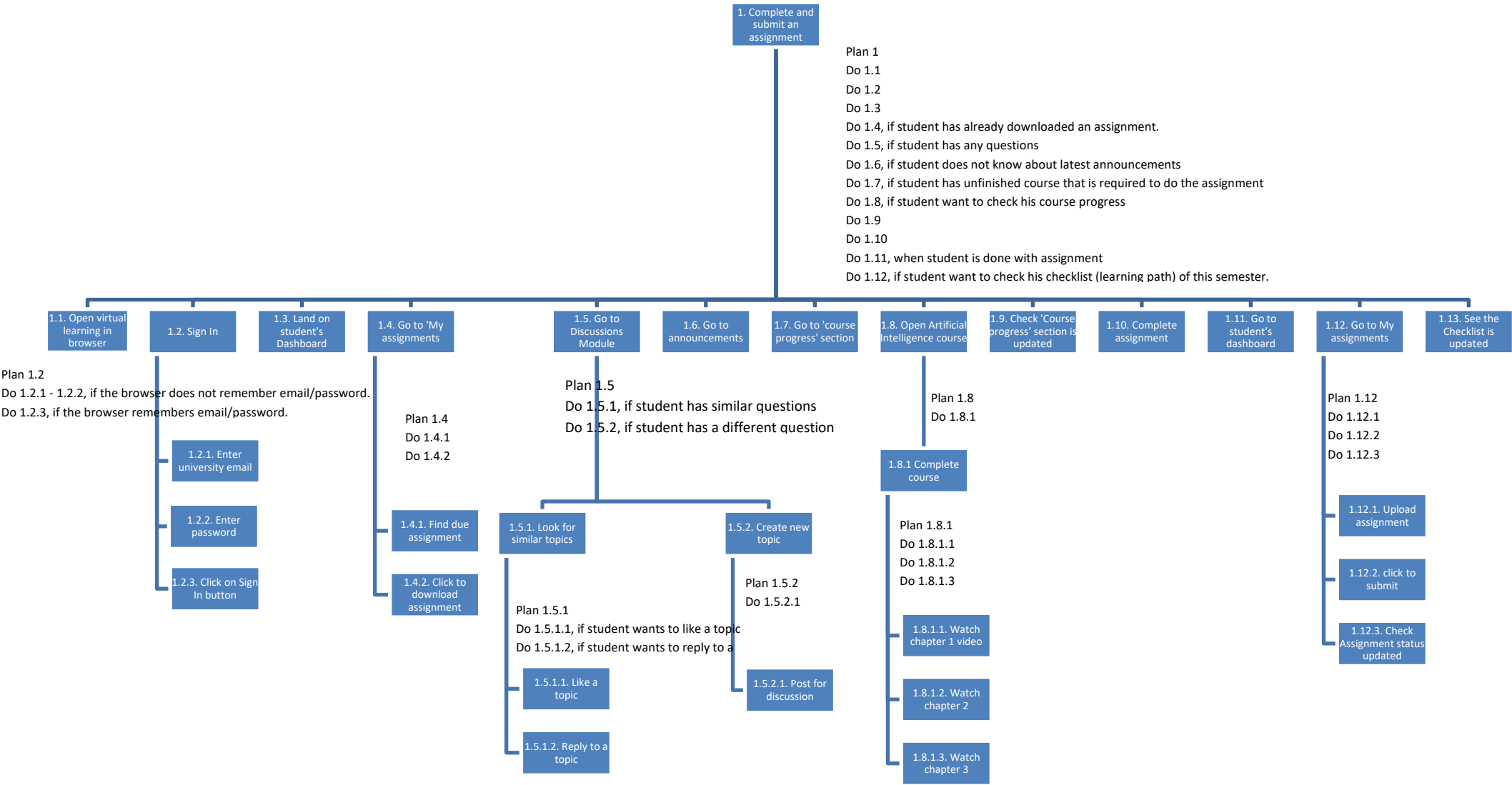# Task 3

Part a

Persona: Working Student
Name: David Rose
Scenario 1:

David has been so occupied because of his thesis work. The semester is ending, and he could not manage time to do a week-long assignment and attend the lectures relevant to it. The assignment is due in 2 days. He has no idea about discussions and new announcements. He is now worried about his course progress. He wants to cover his due tasks and lectures to make sure he completes his courses and their assignments on time. He opens the virtual learning portal to start working. The product has a dashboard that shows the progress and performance of David at a glance. In the 'Course Progress' section, he can see the list of all the courses and his progress in them. In the 'Checklist' section, all the courses, events (seminars) and activities are listed that are due this semester. This checklist is a learning path designed for students of Informatics, and it not only provides structure to the program but also gives freedom to begin from wherever David wants. This control over the learning process enhances his learning capabilities. The dashboard has 'My Assignment' section where all the completed and due assignments are listed. David has AI assignment 2 due which he wants to complete without wasting any time. He downloads the assignment, but he is confused about some things and does not know where to start. The dashboard also shows new notification bubble which tells new activities happened in announcements and discussion modules that have not been seen yet. He quickly goes to the Discussions and looks for similar questions. All discussion points were nicely categorized under their topic name, thus he does not have to read each and every question. There is one announcement notification which David clicks on the to see what the announcement is about. He finds that Lecture 1 and 3 from AI course are the prerequisites for this assignment. David sees that on the top of the dashboard the notification bubble has vanished and it says "You are all caught up". Now he is pretty confident that he has not missed anything. He selects AI course from course progress section to start working. David's progress in AI course is 0%. But since our project is built on Learner's choice of learning path, David completes lecture 1 and 3 of the course and skips lecture 2. Thankfully these streamed lectures are saved and shared with students inside these courses. Thus, there is no issue in getting access to the materials. Finally, David works on his assignment and submits it. The assignment's status has now changed to completed on the dashboard and he has also made progress in AI course which is 70% now. David complets his assignments really quick, and he still has some time hence he decides to finish the second lecture as well. After finishing, the AI course automatically gets ticked under the checklist section.

Part b

HTA of Scenario 1

1. Complete and submit an assignment

Plan 1
Do 1.1
Do 1.2
Do 1.3
Do 1.4, if student has already downloaded an assignment.
Do 1.5, if student has any questions
Do 1.6, if student does not know about latest announcements
Do 1.7, if student has unfinished course that is required to do the assignment
Do 1.8, if student want to check his course progress
Do 1.9
Do 1.10
Do 1.11, when student is done with assignment
Do 1.12, if student want to check his checklist (learning path) of this semester.

- 1.1. Open virtual learning in browser
- 1.2. Sign In
- 1.3. Land on student's Dashboard
- 1.4. Go to 'My assignments
- 1.5. Go to Discussions Module
- 1.6. Go to announcements
- 1.7. Go to 'course progress' section
- 1.8. Open Artificial Intelligence course
- 1.9. Check 'Course progress' section is updated
- 1.10. Complete assignment
- 1.11. Go to student's dashboard
- 1.12. Go to My assignments
- 1.13. See the Checklist is updated

Plan 1.2
Do 1.2.1 - 1.2.2, if the browser does not remember email/password.
Do 1.2.3, if the browser remembers email/password.

- 1.2.1. Enter university email
- 1.2.2. Enter password
- 1.2.3. Click on Sign In button

Plan 1.4
Do 1.4.1
Do 1.4.2

- 1.4.1. Find due assignment
- 1.4.2. Click to download assignment

Plan 1.5
Do 1.5.1, if student has similar questions
Do 1.5.2, if student has a different question

- 1.5.1. Look for similar topics
- 1.5.2. Create new topic

Plan 1.5.1
Do 1.5.1.1, if student wants to like a topic
Do 1.5.1.2, if student wants to reply to a

- 1.5.1.1. Like a topic
- 1.5.1.2. Reply to a topic

Plan 1.5.2
Do 1.5.2.1

- 1.5.2.1. Post for discussion

Plan 1.8
Do 1.8.1

- 1.8.1 Complete course

Plan 1.8.1
Do 1.8.1.1
Do 1.8.1.2
Do 1.8.1.3

- 1.8.1.1. Watch chapter 1 video
- 1.8.1.2. Watch chapter 2
- 1.8.1.3. Watch chapter 3

Plan 1.12
Do 1.12.1
Do 1.12.2
Do 1.12.3

- 1.12.1. Upload assignment
- 1.12.2. click to submit
- 1.12.3. Check Assignment status updated

Part a

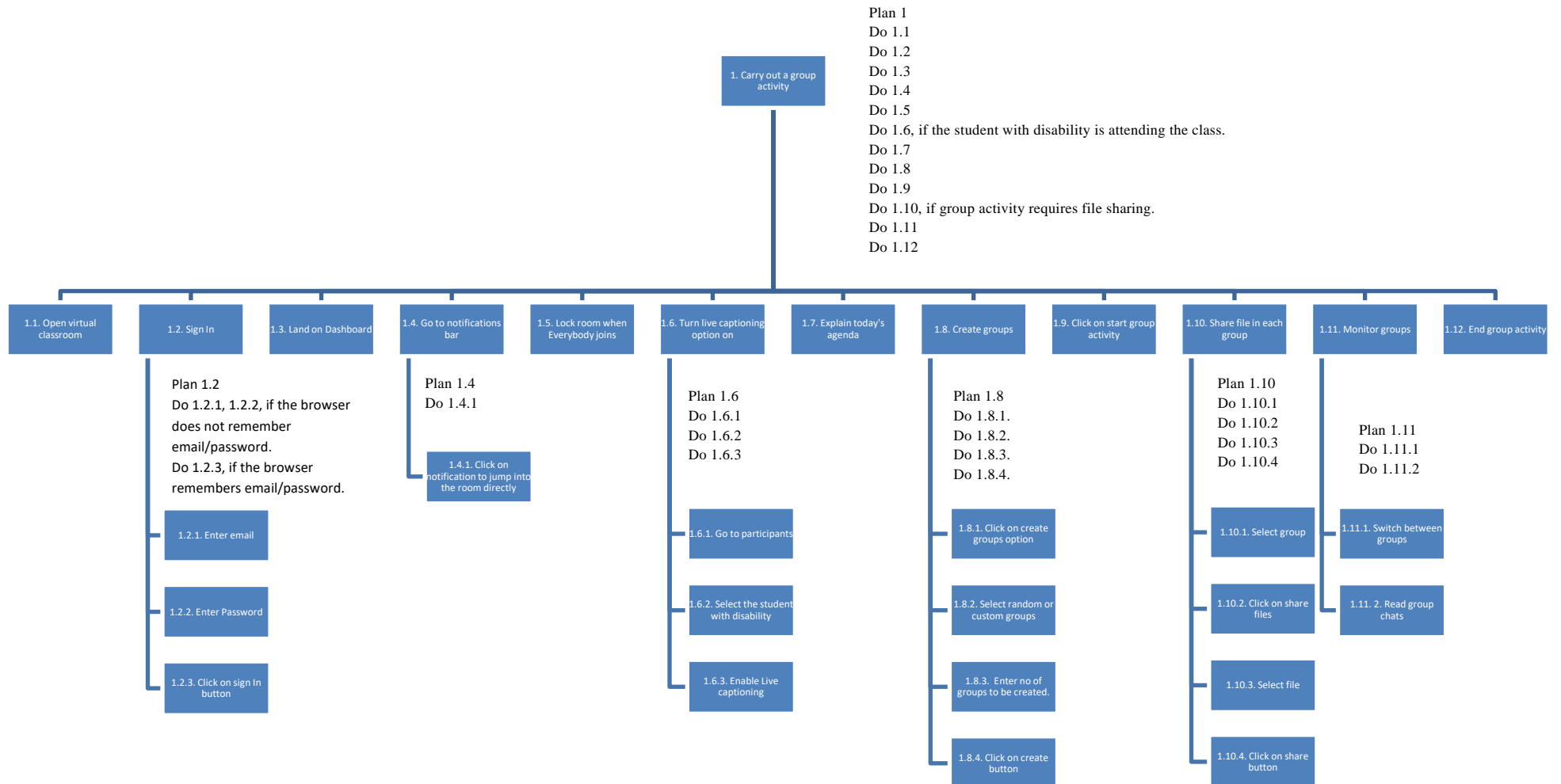**Persona:** A Professor of statistics in the Informatics Department
Name: Maya Henry
Scenario 2:
Maya is aware that her students have been feeling isolated in this kind of learning experience, and she has received depressing emails from her students. Thus, she planned an activity and created a lecture for this activity a week ago. The virtual classroom is mobile friendly, and it automatically sets an alarm for this lecture when it was created. About half an hour before the lecture starts, it notifies Maya. Maya opens the virtual classroom. On the dashboard there is a notification bar which says "Your class in 20 minutes, click to join room". She clicks on the notification to join the room directly. Maya's class has a deaf student in her class. So before starting off, she enables the live captioning for that student for accessibility. She talks about the agenda for group activity. This lecture is also informative but is rather a fun one. She makes 2 groups and shares two different problems with them. Each group has to analyze and come up with their interpretations of the problem at hand. The purpose is to help students engage with each other more interactively and help each other out while collaboratively working towards a common goal. This activity is aimed atpromoting team work. The criterion of this competition is that the group that gives more interpretations of the problem wins. There are no correct and wrong answers here. This is meant to encourage students to participate and speak up actively. The more they participate, the more it will enhance their confidence and the more points they will win. Each group acts in a small room inside a big virtual room. All the functionality will be the same for small rooms as it is for the main room. When the groups are created, it automatically creates two group chats as well where they are encouraged to share written answers as it is feasible for everybody to understand and collaborate. Maya can easily switch between the two groups and monitor them. By the end of class, she clicks on end group activity and shares her feedback on the performance of both groups and then announces the winner group.

Part b
HTA of Scenario 2

1. Carry out a group activity

Plan 1
Do 1.1
Do 1.2
Do 1.3
Do 1.4
Do 1.5
Do 1.6, if the student with disability is attending the class.
Do 1.7
Do 1.8
Do 1.9
Do 1.10, if group activity requires file sharing.
Do 1.11
Do 1.12

1.1. Open virtual classroom

1.2. Sign In

Plan 1.2
Do 1.2.1, 1.2.2, if the browser does not remember email/password.
Do 1.2.3, if the browser remembers email/password.

- 1.2.1. Enter email
- 1.2.2. Enter Password
- 1.2.3. Click on sign In button

1.3. Land on Dashboard

1.4. Go to notifications bar

Plan 1.4
Do 1.4.1

- 1.4.1. Click on notification to jump into the room directly

1.5. Lock room when Everybody joins

1.6. Turn live captioning option on

Plan 1.6
Do 1.6.1
Do 1.6.2
Do 1.6.3

- 1.6.1. Go to participants
- 1.6.2. Select the student with disability
- 1.6.3. Enable Live captioning

1.7. Explain today's agenda

1.8. Create groups

Plan 1.8
Do 1.8.1.
Do 1.8.2.
Do 1.8.3.
Do 1.8.4.

- 1.8.1. Click on create groups option
- 1.8.2. Select random or custom groups
- 1.8.3. Enter no of groups to be created.
- 1.8.4. Click on create button

1.9. Click on start group activity

1.10. Share file in each group

Plan 1.10
Do 1.10.1
Do 1.10.2
Do 1.10.3
Do 1.10.4

- 1.10.1. Select group
- 1.10.2. Click on share files
- 1.10.3. Select file
- 1.10.4. Click on share button

1.11. Monitor groups

Plan 1.11
Do 1.11.1
Do 1.11.2

- 1.11.1. Switch between groups
- 1.11. 2. Read group chats

1.12. End group activity

Task 2: Understanding the user

a.Observe the users in Discord, Zoom, and Moodle

(a.i.) Observations based on a pretense of not knowing anything else about the course apart from what is available on Discord and Moodle **[Assuming that the new user got access at this point of the course]**

➔ *Observation:* The website could be renamed as 'HCI-Group' or the students could be restricted to see only those courses which they sign up for
Description: The website is named 'HCI-Lecture', similar to the name of the course making the user presume that it is dedicated only to the HCI course. This might confuse a new user when they see another course 'Seminar: Interactive Robotics' on the home page
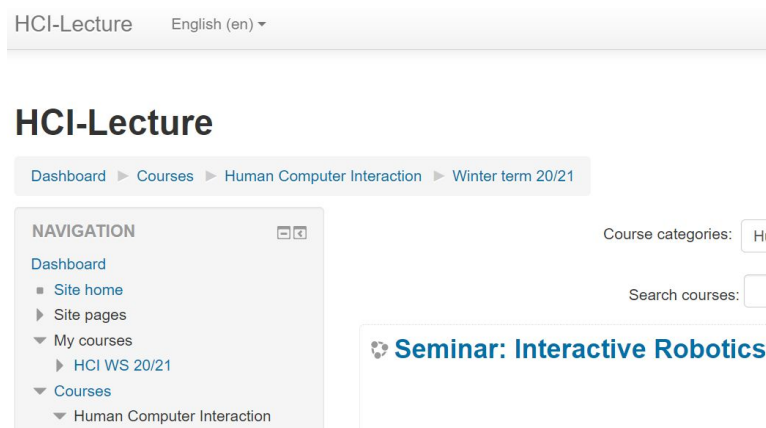
➔ *Observation:* A better description of the channels might be helpful for a new user
Description: Assuming that a first time user joins the course now, it is unclear what the interviews are about
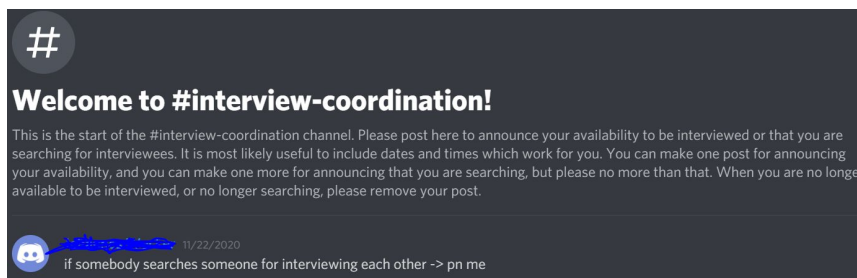
➔ *Observation:* There should be a better way to allocate people to tutorials within discord
Description: Every student in the HCI course has to write their tutorial preference in the 'registration' channel to be allocated to the corresponding channel in Discord. It is a lot of manual work to read through all the messages and assign students accordingly for the tutors

Please sign me up for tutorial Group 6 (edited)
👍 1

Please sign me up to group 1

Hello 🙂 Please first change your name to your complete name as in Moodle.

➔ *Observation:* Office hours of the professor should be made visible and messages could be made private
Description: Most of the students who request for an office hour are shy to ask their questions in the class. The messages in this channel are public which discourages them from making use of this platform. Also, not displaying the professor's availability discourages most of the students since they might feel obliged to accept the time suggested by the professor.

Welcome to #office-hour-sign-up!
This is the start of the #office-hour-sign-up channel. This channel is for signing up for a 1 on 1 meeting with Prof. Steimle

➔ *Observation:* A better way of sharing the links could be used - maybe a calendar with links in it or even one link for all lectures
Description: Moodle has a calendar feature which could be used to schedule all the lectures and the links could be shared via the calendar

Paul Strohmeier 11/25/2020
@Student todays lecture will be streamed here, at 14:15: https://cs-uni-saarland-de

before the lecture there will be the possibility to ask questions to Professor Steimle.

Zoom Video
Join our Cloud HD Video Meeting
Zoom is the leader in modern enterprise video communications, with an easy, reliable cloud platform for video and audio conferencing, chat, and webinars across mobile, desktop, and room systems. Zoom Rooms is the original software-based conference room solution used around the world in board, conference, huddle, and training rooms, as well as ex...

➔ *Observation:* Important announcements such as updating the already published assignments could be put up in moodle as well
Description: Many channels and users in Discord obviously generate a lot of chaos and overwhelms users and makes it difficult to follow up. Moodle is less cluttered and it is accessed often to download lecture content. Hence, any important updates should be published in moodle as well (for students who miss some lectures)

PUBLIC
registration
?-help

COMBINED ACTIVITIES
🌐-general_discussion
!-general-announcem... ③
📋-materials
?-questions-and-ans...
office-hour-sign-up
suggestions
interview-coordination

TUTORIAL GROUPS
tutorial-1

Paul Strohmeier 11/25/2020
@Student I have updated the assignment
Changes are:
- *I replaced the word 'lecture' with 'course'* -- I have previously communicated that I meant lecture in a broad sense, but by doing it here I am making it explicit. If you were focusing solely on a lecture, this is of course also OK, as making lectures better makes the course better.

➔ *Observation:* Ebooks of the references could be made available in the interface
Description: It might be difficult for the students to access books online especially when it is not freely or easily available online

Hi, I am trying to access the online version of the book "Interaction Design - beyond human computer interaction" using the link https://ebookcentral.proquest.com/lib/gbv/detail.action?docID=5746446 from the Computer Science library. Despite being connected to the university VPN, this page prompts me for login credentials that I don't have. What am I missing here?
Update: I can not access the book either, but I have asked the CS library for help and will let you know as soo as I have an answer. (edited)

(a.ii.) Observations after attending the online lectures

➔ *Observation:* A better platform which handles many users at the same time should be considered as the primary platform of communication, ideally only one platform should be used
Description: Discord has a limit of 50 participants for video calls and hence couldn't be used. Shifting between moodle, discord and zoom gives a bad user experience, for example - one has to ask questions in discord while watching the lecture in zoom which is not ideal

Paul Strohmeier 11/04/2020
Apologies
I just stopped, because
yes, there seems to be a limit.
Can you all please give me 3 minutes to find an alternative.
👍 10 👌 1

➔ *Observation:* Live lectures are better than meeting together to watch a recorded lecture
Description: Students tend to ask more questions in a virtual lecture which is good. However, when it is a recorded lecture, students tend to post and ask any questions or even chat within themselves in the common discussion forum which might be a distraction for the other students. Having a live lecture or the professor being present helps to have a more formal forum which is only used for direction question and answer keeping the distraction low

➔ *Observation:* Recording the lecture along with the professor's camera on might be helpful
Description: Students who watch the recorded lecture might find it difficult to concentrate when they just have to look at one slide for many minutes for the professor to complete his explanation

➔ *Observation:* The recorded lectures should have the means to capture and display the questions that were asked in the live lecture
Description: In a live lecture, the professor answers some questions asked by the students in the class. However, when a live lecture is recorded, it doesn't contain the questions that were asked by the students through chat but only contains the answers that were provided in audio by the professor, this might be confusing for students who watch only the recorded lecture

(a.iii.) Drawbacks of the observation methods

- Problems with collecting information from (a.i.) and (a.ii.):
    - It doesn't consider a wide range of users and lacks others' perspectives
    - It is a passive form of collecting requirements and only the advantages and disadvantages of the already existing features are observed, no understanding of how the users perceive the interface
    - From (a.i.) and (a.ii.), there is no good understanding of the needs of a wide range of users. However, by interviewing the users and a wide range of stakeholders, we shall have a better understanding of their needs and expectations which will lead to creating new much-needed features
- Hidden:
    - Perspectives of other users are hidden. The observations made in (a.i.) and (a.ii.) are passive and don't take into account a perspective of a person who engages with the interface on a regular basis
    - Important observations about how various other users interact and perceive the interface are hidden
    - There is no clear understanding of whether the already existing features serve all the purposes of all the stakeholders. Their experience with the interface and expectations and needs are hidden

- Drawbacks:
  - In (a.i.), the observation was made passively by just looking at the interface and not by interacting with it
  - In (a.ii.), we made an active observation after interacting with the interface which is better in comparison to (a.i.)
  - However, in both (a.i.) and (a.ii.), the observations are from only one person's point of view. It does not consider the perspectives of other users and also limits the range of users/stakeholders
  - Perspectives and perceptions of other stakeholders who frequently use the interface are hidden
  - Some of the advantages and disadvantages of already existing features are known

Task 2:

2b i): Demographic questions:

1. **Age**: Age group of the users helps us to understand their needs, their generation, and usage familiarity, which should be considered when making user interfaces and designs.
2. **Sex**: Help to identify if there is any gender-specific challenge.
3. **Profession**: Helps to understand the user and stakeholder according to their profession i.e. if they are a student, or tutor, or a professor.
4. **Highest Education level**: There can be users having different educational backgrounds, so it helps us understand what challenges can be there for people with different educational backgrounds.
5. **Computer proficiency**: (User characteristics) The system that we provide requires basic knowledge of computer and mobile handling, so it's good to consider the challenges that a person with less computer proficiency can face and how we can try to solve them.
6. **Location/Timezone**: Users can be located in different timezones, so it will help the scheduling assistant to consider time zones while scheduling any meetings. Also, in some countries, there can be restrictions on usage or different policies for recordings.

2b (ii) Interview with the complete format and phase-wise distribution.

Interviewer name:

Interviewee name:

Interviewee HCI group number:

Interviewee Role:

Introduction:

1. Introduce yourself.
2. Tell them what the purpose of the interview is.

Warm-up:

1. Do you prefer the semester to be online or offline? What do you miss in virtual lectures? What are the advantages and disadvantages of both methods?
2. How good is your internet connection? Any lag or delay during video streaming?
3. Do you prefer using it in a browser, as a desktop application, or a mobile application?
4. Would you like everything to be on the same platform (registrations, assignments, tutorials, discussions, exams.)

Main Body:

1. What current systems have you used and what are some good and bad things that you find about them. What are the problems, why do you consider it as a problem, which user had that problem (stakeholder)?

   Are they successful? Why or why not?

2. What are the main functionalities that you want the system to have? (must have)
3. What are additional functionalities that the system can have (good to have)
4. How often do you want to get notifications via email or push notifications on the phone?
5. Are you willing to indulge in activities like games or general discussions to connect with your peers?

6. (if the stakeholder is a Tutor)What are some manual components that you feel should be automated?

If they don't specifically mention anything about these topics, then ask explicitly: (how do they want this to be implemented. (Same platform or different platforms)..)

1. Registration
2. Groups and team's formation
3. Lectures and tutorials streaming
4. Chat during lectures
5. File sharing (lecture slides, recordings, additional materials)
6. Assignments submission and feedback
7. General discussions
8. Office hours

Cool-off:

Demographics questions:

1. Age:
2. Sex:
3. Profession:
4. Highest Education level:
5. Computer proficiency:
6. Current Location/Timezone:

Closure:

Thanks and remarks.

2c:

Details of interviews taken by our team:

1. Name of the interviewer: Ankit Agrawal

   Name of the interviewee: Anonymous Panda

   Group no of the interviewee: G110

   Demographics data:

   1. Age: 23
   2. Sex: Female
   3. Profession: Student
   4. Highest Education level: Bachelors in Mechatronics Engg
   5. Computer proficiency: Very good
   6. Location/Timezone: Saarbrucken

2. Name of the interviewer: Ankit Agrawal

   Name of the interviewee: Anonymous Cheetah

   Group no of the interviewee: Outside HCI

   Demographics data:

   1. Age: 25
   2. Sex: male
   3. Profession: Tutor and Student
   4. Highest Education: Bachelors in Computer Science
   5. Computer proficiency: Very good
   6. Location/Timezone: Saarbrucken

3. Name of the interviewer: Janaki Viswananthan

   Name of the interviewee: Dorothy Jenkins

   Group no of the interviewee: G509

   Demographics data:

1. Age: 33
2. Sex: Female
3. Profession: Student, Tutor
4. Highest Education: Masters in C.S
5. Computer proficiency: Very good
6. Location/Timezone: Saarbrucken

4. Name of the interviewer: Janaki Viswanathan

   Name of the interviewee: Dragon Slayer

   Group no of the interviewee: outside of HCI

   Demographics data:

   1. Age: 22
   2. Sex: Female
   3. Profession: Student
   4. Highest Education: Bachelors in Linguistics
   5. Computer proficiency: Very good
   6. Location/Timezone: Saarbrucken

5. Name of the interviewer: Janaki Viswanathan

   Name of the interviewee: Claudett Mcevans

   Group no of the interviewee: G306

   Demographics data:

   1. Age: 25
   2. Sex: Female
   3. Profession: Student, Online English Teacher
   4. Highest Education: Bachelors in English Literature and Linguistics
   5. Computer proficiency: Very good
   6. Location/Timezone: Saarbrucken

Total interviews taken: 3 (within HCI) + 2 (outside HCI)

6. Name of the interviewer: Ankit Agrawal

   Name of the interviewee: Anonymous Hawk

   Group no of the interviewee: G309

   Demographics data:

   1. Age: 25
   2. Sex: Male
   3. Profession: Student
   4. Highest Education: Bachelors in Computer Science
   5. Computer proficiency: Very good
   6. Location/Timezone: Saarbrucken

Total interviews taken: 4 (within HCI) + 2 (outside HCI)

2c ii) 5 key findings from all interviews:

1. **Recording lectures**: Good to provide an option to the user to record faces or not: 'only host' or 'host and speaker' or 'all participants'.
   - (Dorothy Jenkins, G509, Anonymous Hawk, G309)
2. **Assignment submission and feedback:** When one person submits it, it should get reflected to all the team members and everyone in the team should be able to access the submitted file and feedback too.
   - Dragon Slayer, non-HCI
3. **Recording of the lectures:** there is always manual work needed to monitor and record the lecture and then move into the folders and upload it, this whole process can be automated.
   - (Anonymous Cheetah, non-HCI; Dorothy Jenkins, G509)
4. **Files/Assignment handling:** As many tutors work on the same assignments and files, there should be a version control to keep track of all the changes, and a deployment system to the website, which doesn't require manual handling and uploading of files.
   - Anonymous Cheetah, non-HCI
5. **Plagiarism check:** Currently there are no automated ways to do plagiarism checks for the assignments. Very difficult if there are a large number of submissions. Need to automate this process.
   - Anonymous Cheetah, non-HCI
6. **Common platform and calendar:** for all the courses, a single platform and a common calendar which has all the appointments, scheduled meetings invites, all at one place so there is no manual handling of invite links.
   - (Anonymous Cheetah, non-HCI; Anonymous Panda, G110)

7. **Notification filters:** there should be filters to apply while getting notifications via email and also via push notification on phones.
   - *(Anonymous Panda, G110; Dorothy Jenkins, G509)*
8. **Interaction among peers:** Weekly hangout activities and breakout rooms having different topics of discussion be included (topics like sports, movies, travel, books, etc). Also, there can be a provision of quiz channels having leaderboards with some incentive of bonus points, these methods will help interaction among the peers.
   - *(Anonymous Cheetah, non-HCI; Anonymous Panda, G110; Claudett Mcevans, G306)*
9. **User profile:** All students must be required to create their profile which has their basic background details like (education, experiences, skills, current semester and major of studies, etc.), which will make it easier to find a teammate and know about their proficiencies.
   - *Anonymous Panda, G110*

2c iii) For the bonus we have interviewed 2 persons who are outside of HCI and one additional interview inside HCI. (Details as mentioned above in 2c (i))

2d i)

1. Name of the interviewee: Ankit Agrawal

   Group no of the interviewer: G309

2. Name of the interviewee: Ankit Agrawal

   Group no of the interviewer: G608

3. Name of the interviewee: Janaki Viswanathan

   Group no of the interviewer: G509

4. Name of the interviewee: Janaki Viswanathan

   Group no of the interviewer: G306

5. Name of the interviewee: Ankit Agrawal

   Group no of the interviewer: G110

6. Name of the interviewee: Rameen Ghafoor

   Group no of the interviewer: G309

2d ii) As informed, we just need to write the list of the group no. to whom we gave an interview (As mentioned above)

Task 3:

Task 4: Requirements

Requirement:
Type: Functional/ Data/ Environmental/ User characteristics
Importance level: Must-have/ Should-have/ Nice-to-have
How is it developed: Observation/ User Interview

#	Requirement	Type	Importance Level	How is it developed?
1.	Single platform for all courses having components like registration, teams formation, assignment submission, feedback, files sharing, lecture streaming and recording, discussion forums, etc	Functional	Must-have	Observation and User interview
2.	Flawless streaming of lectures that can hold the capacity of up to 500 students at once.	Environmental	Must-have	Observation
3.	Assignment submission & feedback should be reflected in all the team member's profiles	Functional	Must-have	User interview
4.	An option to record videos of 'only host' or 'only host and speaker' or 'all participants'.	Functional	Nice-to-have	User interview
6.	A feature to track personalized course progress for each student in a course	Functional	Should-have	Observation
7.	Notification filters: Option to filter email and push notifications according to the user.	User characteristics	Should-have	User interview
8.	Common calendar: A single calendar which has all the	Data	Must-have	User interview

	appointments, lectures and tutorials invites, for all the courses in one place. (No manual handling of links)			
9.	A section having details about the research Institutes and job openings.	Data	Nice-to-have	User interview
10.	Weekly hangouts and breakout rooms for interaction among peers.	Environmental	Nice-to-have	Observation
11.	Quiz channels with leaderboards to get along with peers	Environmental	Nice-to-have	User interview
12.	Plagiarism check: An automated method to do the plagiarism check for all assignment submissions.	Functional	Nice-to-have	User interview
13.	A Version Control to keep track of all the changes made by tutors, and a deployment system to the website, which doesn't require manual handling and uploading of files.	Environmental	Nice-to-have	User interview
14.	User Profiles: All students must be required to create their profile which has their basic background details like (education, experiences, skills, current semester and major of studies, etc.), which will make it easier to find a teammate and know about their proficiencies.	Data	Nice-to-have	User interview
15.	Live captioning to aid students with hearing disability	User characteristics	Should-have	Observation