HCI HW-2
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Task 1:

Goal:Using a microwave oven to heat last night's food
Subtasks:
Open the fridge and take out the food
keep the food in the oven
Setting the time and heat level
Turn on the oven and wait for the bell to ring
take out the food and check if it's warm enough
Maybe It needs to be more warm then repeat the above steps again

Goal: Using a calculator to solve questions of assignment
Subtasks:
Turn on the calculator
Enter the numbers and operations to do
see the result and check its correctness.
If it is incorrect then will retry the steps

Goal: Running on a treadmill
subtasks:
Turn on the treadmill and select the mode
Setting the speed and incline
Start running
Keep checking heart rate if this option is available
Stop the treadmill

Goal: Using a smartwatch to check the to-do list
Subtasks:
Turn on the watch by tapping on it
Go to the to do list app
see pending tasks for the day
Mark the tasks which are completed

Goal: Watching cricket match highlights on YouTube
Subtasks:
Open the youtube app
Search for the specific match using relevant keyword
Check for quality
Adjust volume
Skip ads and unnecessary parts of the match

Goal: Sending a snap on Snapchat
Subtasks:
Open the snapchat app
Capture the snap
Add filters, stickers, or captions.
Select who to send the snap to.
Send the snap and then close the app

Using a microwave oven to head the food:

Who is going to use the system: Anyone who needs to hear or cook food, like also for baking purposes too. Users include students, professionals, and homemakers, housewives etc.

How are the tasks learned : Through previous experience, instructions on the oven, trial and error, or learnt from others (parents, friends, online tutorials like through youtube etc)

Where are the tasks performed: In kitchens at home, offices, schools, or restaurants.

What happens when things go wrong: The food might get burned, also might require heating adjustments. Incorrect settings (power level or time) could do incorrect heating. Electrical issues like using it on less voltage or more voltage than specified could cause the microwave circuitry to burn also, could lead to various short circuits.

What is the relationship between people & data: People input data which in this case would be time and level in the oven and then heating is done. Some smart microwaves use sensors or app connectivity. The interaction is like a simple feedback where users check if the food is properly heated and then they heat again if needed.

Sending a Snap on Snapchat

Who is going to use the system : Primarily young people, students, influencers, and social media users who share updates with friends.

How do people communicate with each other: By sending snaps, text messages, and using voice/video calls within the Snapchat app.

How often are the tasks performed: Many users send snaps daily or multiple times a day, especially for maintaining streaks or sharing moments.

What other tools do people have: Alternative platforms like WhatsApp, Instagram Stories, and Facebook Messenger offer similar features.

What happens when things go wrong: Due to poor internet connection, snaps don't get sent. App crashes if cache is alot or maybe in other cases but app crashes. Users by mistake can send the snap to any wrong person that they don't intend to send to.

Task 2:

So i decided to get these 2 tasks done by my mom as she is elder and has not so much experience in dealing with technology, like she knows how to use the basic technological devices use of mobile phone and other basic technological accessories but not too advanced technology like smart watch etc so i decided she would be best 2test case to get these tasks performed. The tasks i made her do were these:

Using a Smartwatch to Check a To-Do List:

Subtasks:

1. Turn on the smartwatch (she needed help on how to turn it on)
2. Swiping until to do list app is seen
3. Open the app and take time to understand the UI
4. Scrolling through tasks carefully reading each one
5. Marking completed tasks (she needed help on how to mark it)
6. Attempting to add a new task (she learnt herself by seeing + button)
7. Exit the app

Who is going to use the system: My mom, who is less familiar with smartwatch interfaces but wants to track her daily tasks efficiently.

How are the tasks learned: Initially, through trial and error, assisted by me guiding her through navigation. Over time, she becomes more comfortable with frequent use.

What happens when things go wrong: anything like that didn't happen but if it did happen then she would take help from me and ask to see what has happened.

What are the time constraints on the tasks: since she is learning, it might take longer initially to get familiar with the app and keep on adding the tasks/reminders.

What other tools do people have: physical registers or notebooks are good options but again they aren't as portable as a smartwatch is.

Watching Cricket Match Highlights on YouTube:

Subtasks:

1) Open the YouTube app on her phone. Taps the search bar and slowly types "Cricket match highlights".

2) Scrolling through the results and asking which video is the right one.

3) Start watching the video but wait for ads to finish instead of clicking skip button

4) Adjusting volume by pressing phone buttons

5) Try skipping the key part of the match but struggle with the small bar.

6) Exit the app

Who is going to use the system: My mom who watches cricket highlights occasionally but is not very familiar with YouTube's UI

How are the tasks learned: She learnt by making mistakes, asking for help when needed. she became more comfortable searching for videos and adjusting settings.

What happens when things go wrong: She struggles with typing in the search bar, selecting the wrong video, or skipping ads. And then she asks me for guidance on how to get through it.

What other tools do people have: Instead of YouTube, my mom could watch cricket highlights on TV, news apps, or sports websites.

How often are the tasks performed: She watches highlights occasionally whenever she misses a big match like pak vs ind.

Task 3)

1st scenario: So my mom uses whatsapp very frequently and the issue she faces is that whenever she is calling someone on whatsapp, the call is going on properly but suddenly some other people also get added into the call. According to her, and also logically, specifically in the call UI of the whatsapp at top right there is an option to add someone to the call, and when she keeps phone on her ear, the ear presses that add button and someone else gets added to the call.

Requirement: So the requirement to improve usability is that the add in call option should instead be at bottom right/left where there is less probability that ear would get in contact with it. And also like users intentionally press the options on bottom right/left, like hanging up the call, muting the speaker etc, so that is the good reason that add to call option should also be in bottom right/left.

2nd scenario: so my aunt faces issue whenever she gives her kids phone to watch youtube, kids are watching it properly video is going on but as they are kids they like to press every button/option, eventually they end up closing the app, so my aunt has to set the video again and orientation of it etc which is a repetitive process and she gets irritated by it.

Requirement: the Requirement is that the youtube app should have a feature of ‘screen lock’ such that when video is being watched in full screen mode, so that even if someone tries to press any button the video screen doesnt goes off and video is still being shown, the unlock could be done by pressing the fingerprint option which would be of the owner of the phone (in this case my aunt). By having this option she or any user wouldn't have to set the video again and again.

Task 4)

Using List View on Canvas for Better Assignment Tracking: One task I perform regularly on Canvas is checking assignments and due dates. Initially, the default Card View made it difficult to track what was due on a given day because it displayed courses separately. This forced me to manually open each course to check assignments, which was time-consuming and inefficient. By time while exploring Canvas settings I discovered the List View which organizes assignments in chronological order. After switching to this mode, assignment tracking became very easier for me as I could now see all due tasks in a day wise sequence.

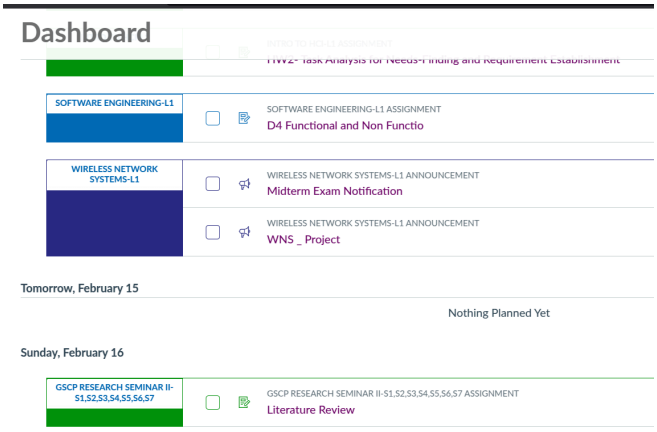
When I first started using Canvas, I struggled with navigating the dashboard properly. The lack of a due date display in Card View forced me to repeatedly check courses separately which obviously increased the chances of missing deadlines for assignments etc. At that time I was unaware that ListView even existed, and because it was not highlighted as an option I kept using the inefficient Card View longer than necessary. Once I discovered list view and set

it as my default after this, navigating the dashboard the issue was permanently resolved and tracking assignments became easy for me and since then i have never missed a deadline.

Now this task has become "invisible" because I no longer need to think about how to find my assignments. Because the list view is set on my canvas permanently I can quickly see all upcoming deadlines in order in front of my eyes all at once which removes the need for extra clicks. This has saved time and increased efficiency in managing coursework.

To make this task "invisible" more quickly for new users I think canvas should introduce a prompt when users first access their dashboard which explains to them the difference between Card View and List View. A simple guided setup option could help students choose the best layout according to them from the beginning. Also better visual indicators in Card View, such as clear upcoming deadlines section could also help new students who want to keep the default view as their option. These improvements would ensure that students discover list View earlier and make assignment tracking smoother from the start.

List view:



Card view: