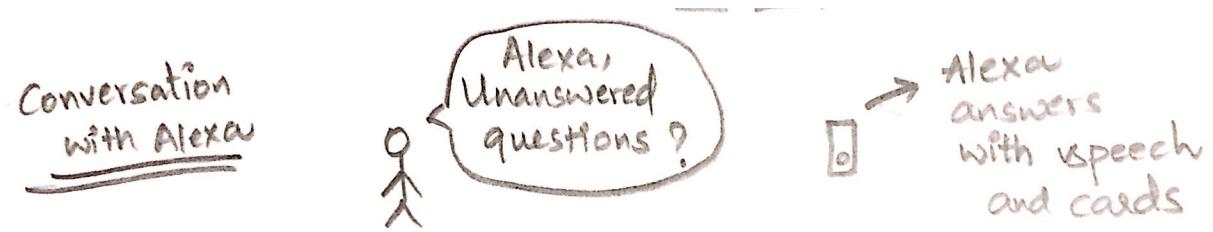
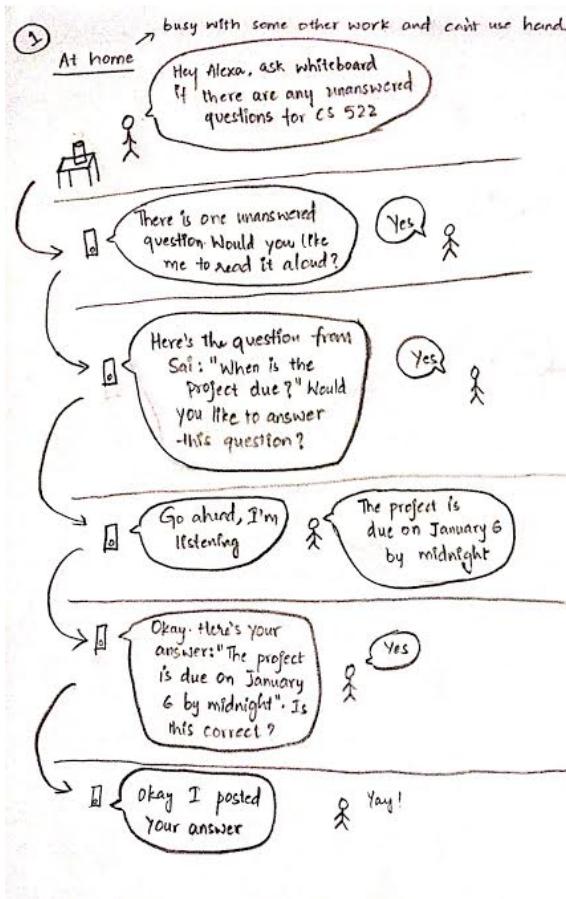


Challenge 1: Answering/checking unresolved questions (To be performed by the instructor).



Challenge 1: Alternatives



Initiation:

"Hey Alexa ask Whiteboard"

Knowing what to say:

"if there are any unanswered questions for CS 522."

Correcting errors:

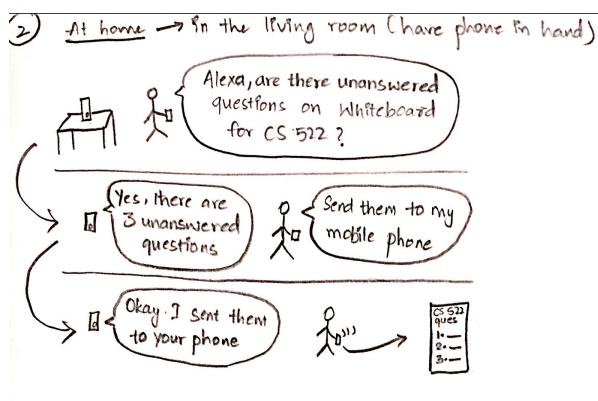
"Is this correct?"

Feedback and dialogs:

"Would you like me to read it aloud?",

"Would you like to answer this question?",

"Okay, I posted your answer."



Initiation:

"Alexa"

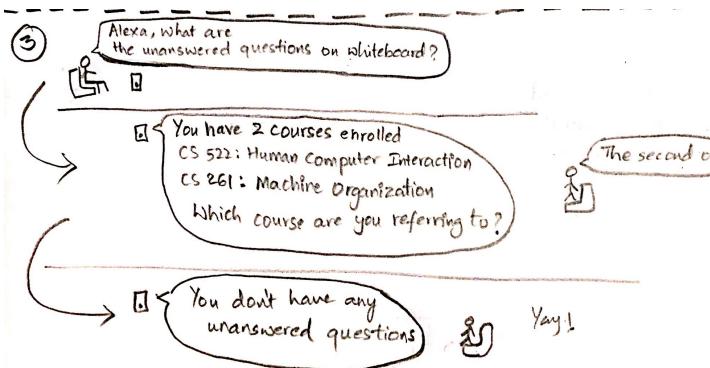
Knowing what to say:

"Are there unanswered questions on Whiteboard for CS 522?"

Feedback and dialogs:

"Yes, there are 3 answered questions"

"Okay, I sent them to your phone"



Initiation:

"Alexa"

Knowing what to say:

"What are the unanswered questions on Whiteboard?"

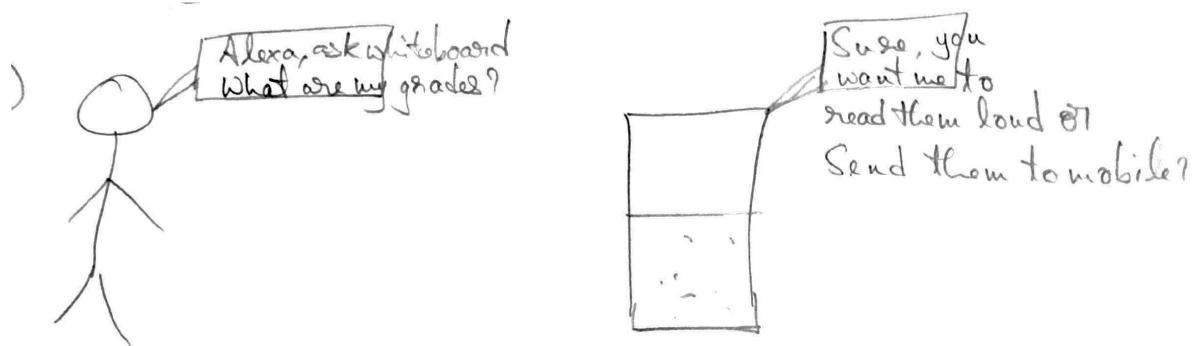
Mapping to possible actions:

"You have 2 courses Which course are you referring to?"

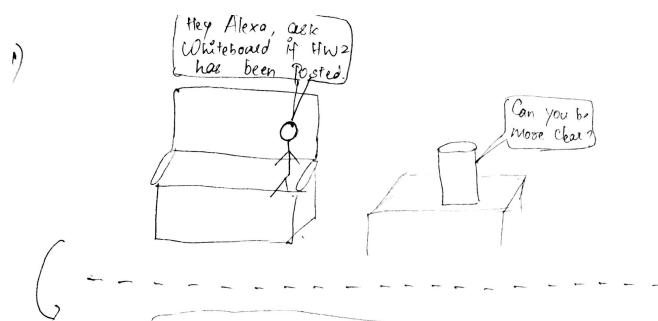
Feedback and dialogs:

"You don't have any unanswered questions"

Challenge 2: Checking for content availability



Challenge 2: Alternatives



Initiation:

"Hey Alexa, ask Whiteboard"



Recognition error:

"Can you be more clear?"

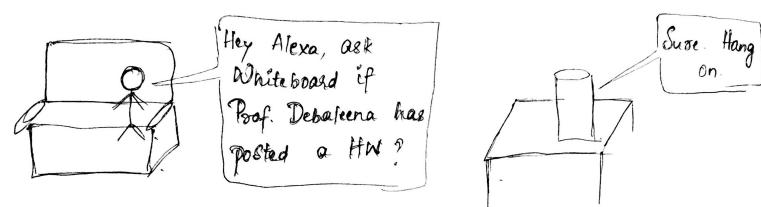
Correcting errors:

"if HW2 has been posted in CS 522 – Human Computer Interaction"

Feedback and dialogs:

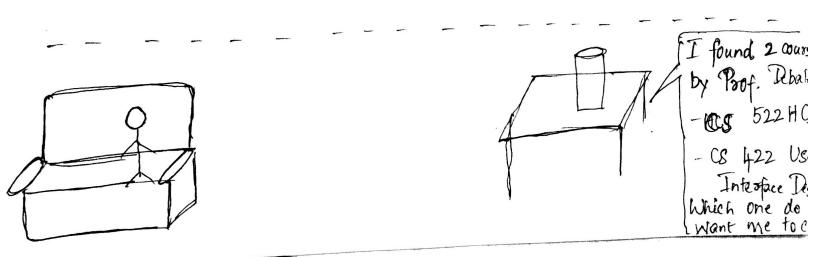
"Yes, HW2 in CS 522 Human Computer Interaction is due on 16th February at 11:59 PM"

2)



Initiation:

"Hey Alexa, ask Whiteboard"



Knowing what to say:

"if Prof. Debaleena has posted a HW"

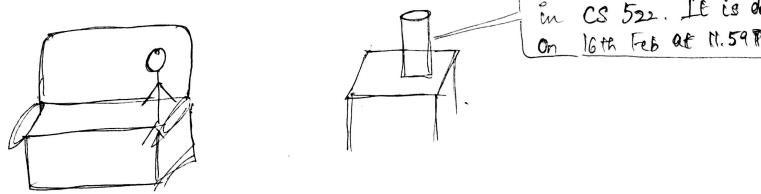
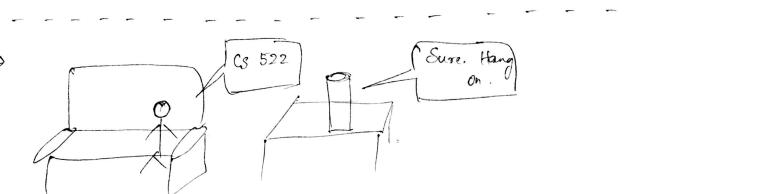
"CS 522"

Feedback and dialogs:

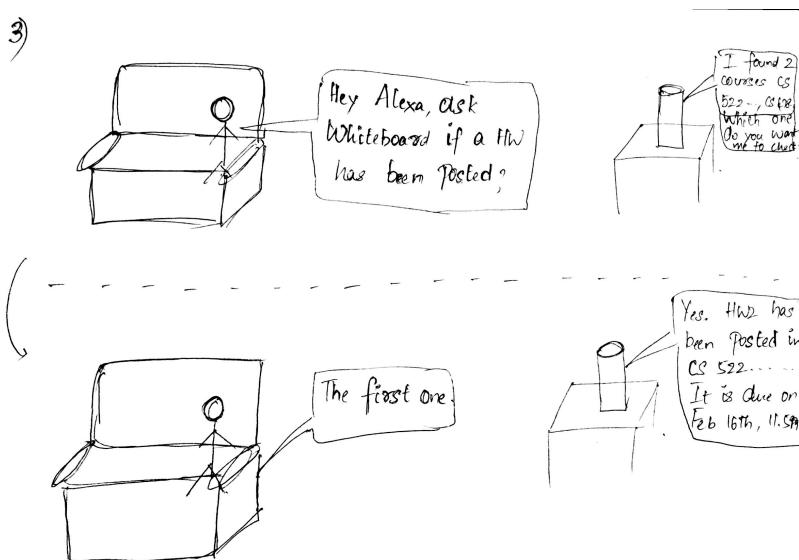
"Sure hang on",

"I found 2 courses by Prof. Debaleena – CS 522 HCI and CS 422 User Interface Design. Which one do you want me to check?"

"HW2 has been posted in CS 522. It is due on 16th Feb at 11:59 PM"



3)



Initiation:

"Hey Alexa, ask Whiteboard"

Knowing what to say:

"ask Whiteboard if a HW has been posted",

"The first one"

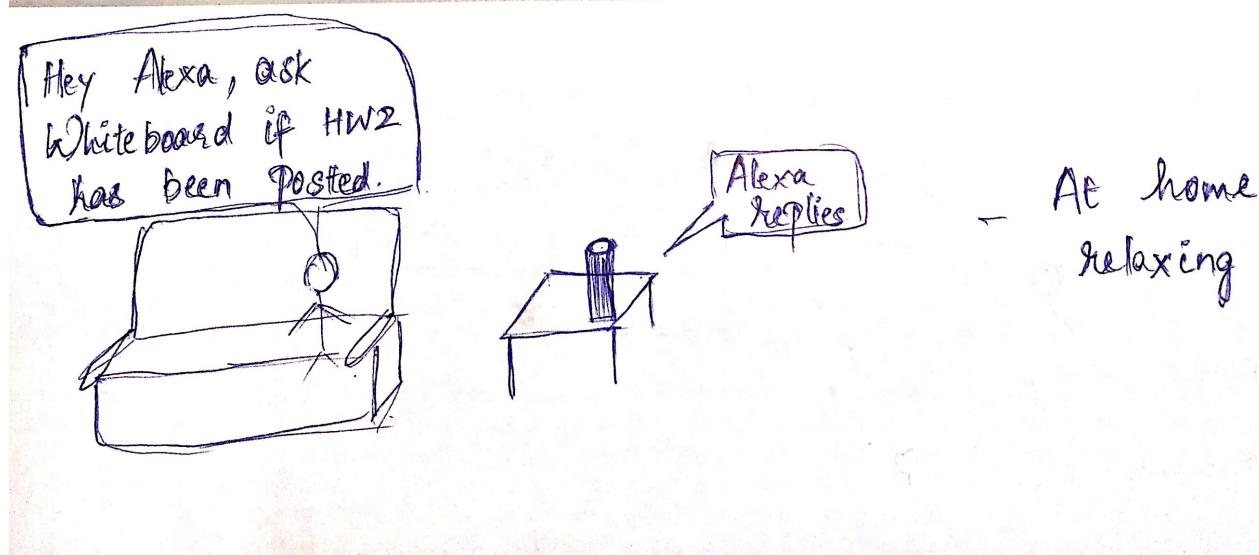
Mapping to possible actions:

"I found 2 courses – CS 522, CS 478. Which one do you want me to check?"

Feedback and dialog:

"Yes HW2 has been posted in CS 522. It is due on 16th Feb at 11:59 PM"

Challenge 3: Checking grades

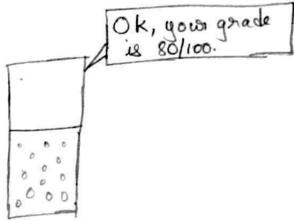


Challenge 3: Alternatives



Initiation:

"Alexa, ask Whiteboard"

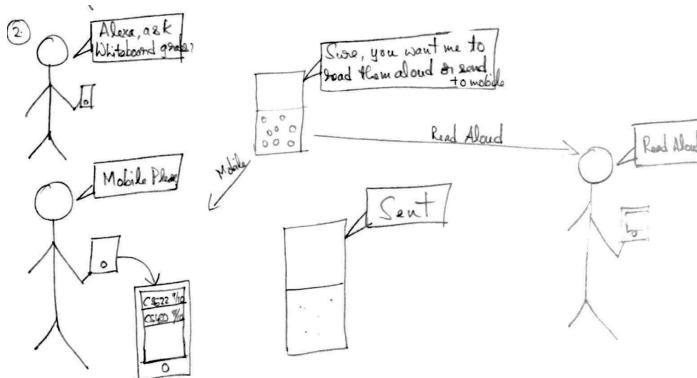


Knowing what to say:

"What is my grade in HW1 in CS522?"

Feedback and dialogue:

"Ok your grade is 80/100"



Initiation:

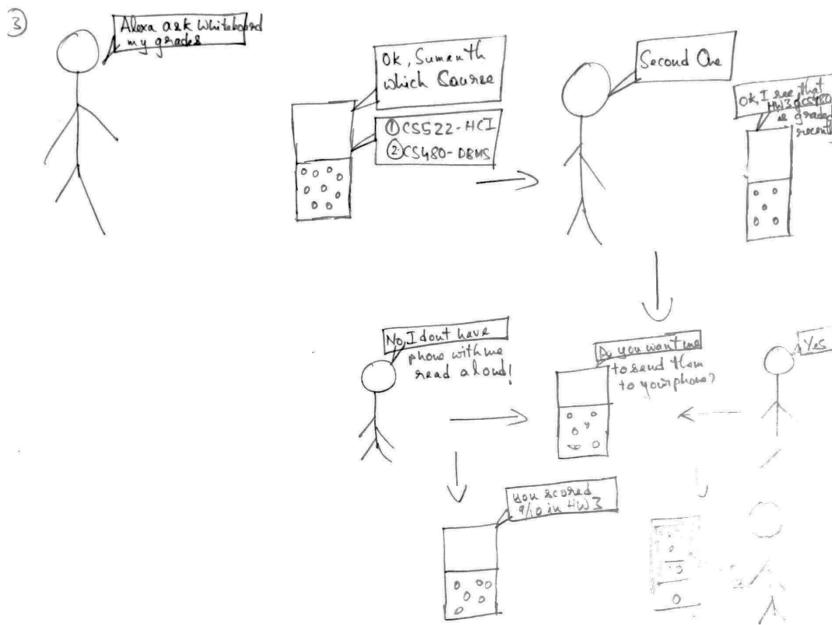
"Alexa, ask Whiteboard"

Knowing what to say:

"Grades?", "Read aloud",
"Mobile"

Feedback and dialogue:

"Sure, do you want me to read them aloud or send to mobile?", "Sent"



Initiation:

"Alexa ask Whiteboard"

Knowing what to say:

"My grades",

"Second one",

"No, I don't have my phone, read aloud"

Mapping to possible actions:

"Ok Sumanth, which course?"

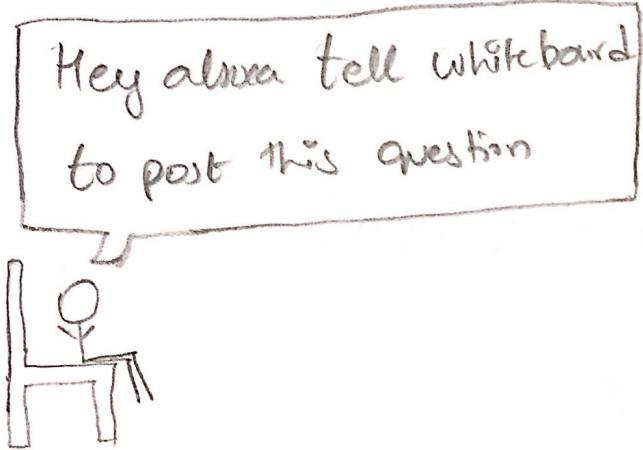
"CS 522 HCI, CS480 DBMS"

Feedback and dialogue:

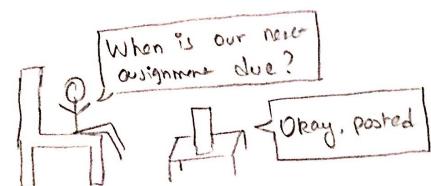
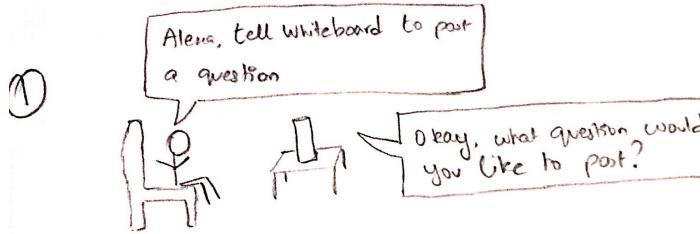
"Okay I see that HW3 in CS 480 has been graded recently.",

"Do you want me to send them to your phone?"

Challenge 4 – Post a question



Challenge 4: Alternatives



Initiation:

"Alexa, tell Whiteboard"

Knowing what to say:

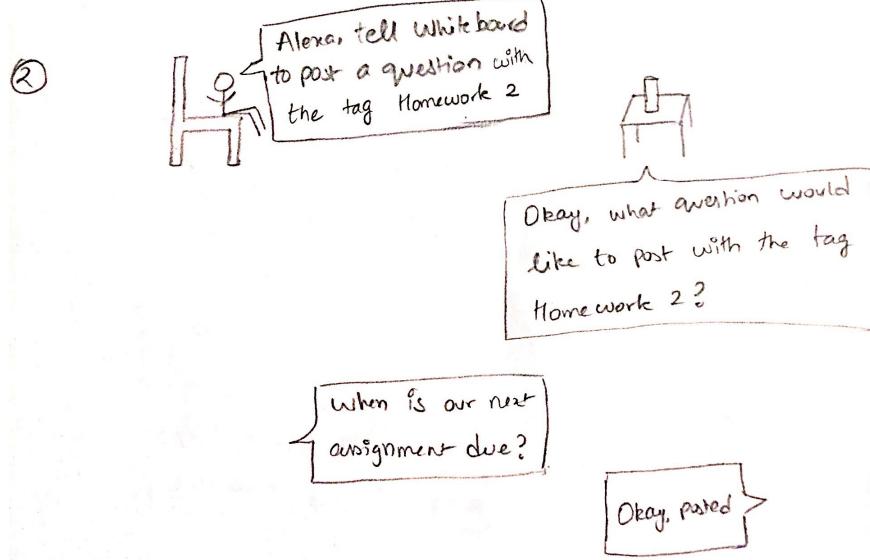
"to post a question",

"When is our assignment due?"

Feedback and dialog:

"Okay, what question would you like to post?",

"Okay, posted"



Initiation:

"Alexa, tell Whiteboard"

Knowing what to say:

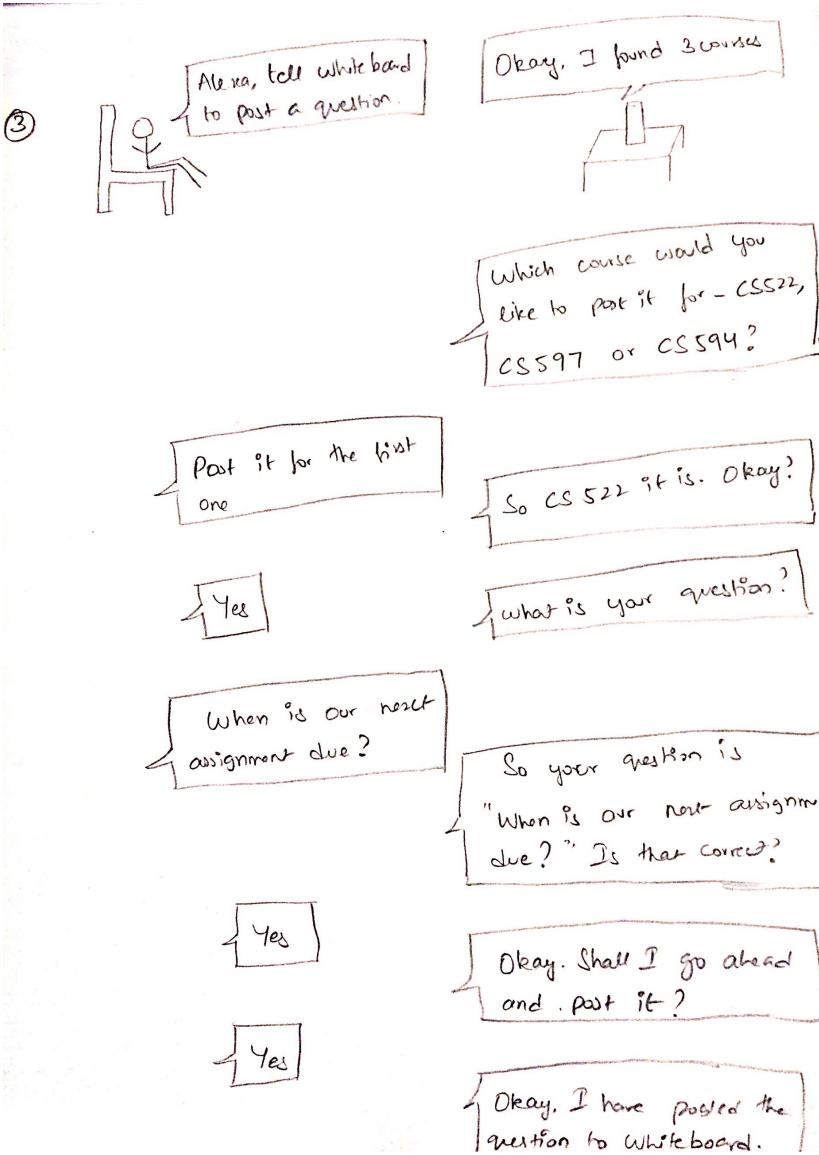
"to post a question with the tag Homework 2",

"When is our assignment due?"

Feedback and dialog:

"Okay, what question would you like to post with the tag Homework 2?",

"Okay, posted"



Initiation:

"Alexa, tell Whiteboard"

Knowing what to say:

"to post a question",
 "Post it for the first one",
 "When is our assignment due?"

Mapping to possible actions:

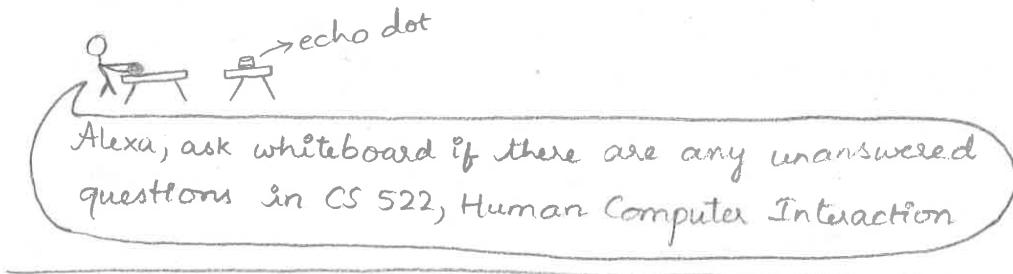
"Okay, I found 3 courses",
 "Which course would you like to post it for - CS 522, CS 597 or CS 594?"

Feedback and dialog:

"So CS 522 it is. Okay?",
 "What's your question?",
 "Okay, so your question is When is our assignment due? Is that correct?",
 "Okay, shall I go ahead and post it?",
 "Okay, I have posted the question to Whiteboard"

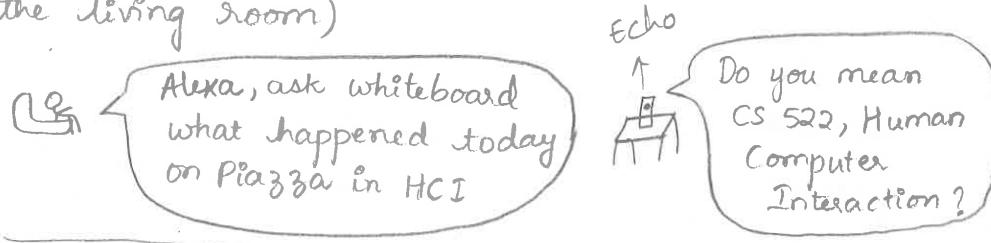
Original Sketches: Challenge 1 - Answering/checking
unresolved questions
(To be performed by the instructor)

- ① (at home) (user is busy doing something in the kitchen.
his/her hands are not free.)



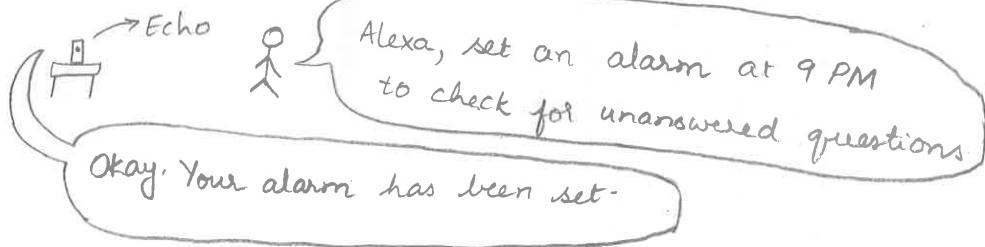
There are 2 unanswered questions.
Sai asked: "When is the project due?"
Sumanth asked: "What do we submit
for sketch diary?"

- ② (user just came home from work) (sits on the couch
in the living room)

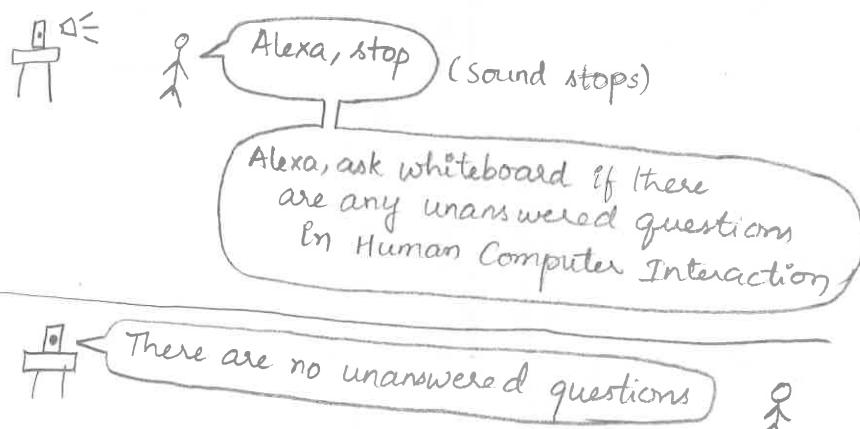


③

(at home in the living room)



At 9 PM:



④

(at home on the couch)



⑤



(user clicks and holds the microphone button using mouse to activate the microphone)

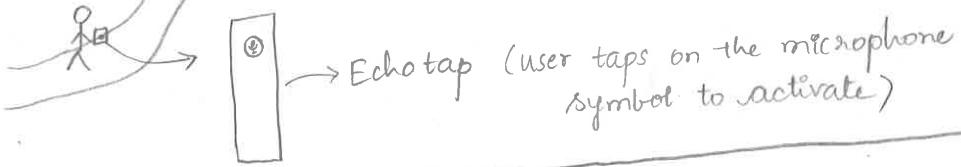
Alexa, ask whiteboard if there are any unanswered questions regarding project 2 in CS 522.

One moment Sai.

There are no unanswered questions for project 2.

⑥

(walking in the park)



Alexa, ask whiteboard the number of unanswered questions for CS 522

Alright.

There are six unanswered questions.

(7) (at home in the living room)

Alexa, ask whiteboard if
students asked any new
questions today in
the course CS 522



Yes, two students
asked questions

Okay. What are those?



Sai asked: "When is the
project due?"

Anonymous asked:
"What is conceptualization?"

(8) (at home)

Hey Alexa, ask whiteboard if
there are any questions
regarding conceptualization
in CS 522



echo

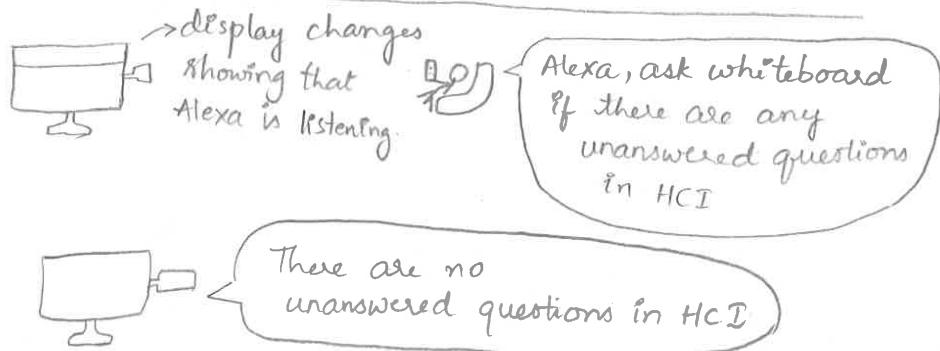
I found one
question with the
tag "Conceptualization"
Anonymous asked:
"What is
conceptualization?"

9

(user is watching TV at home)

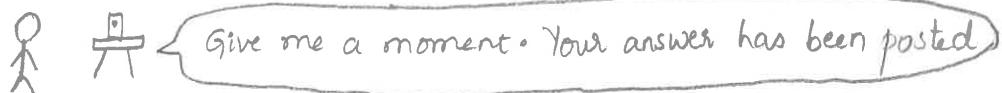
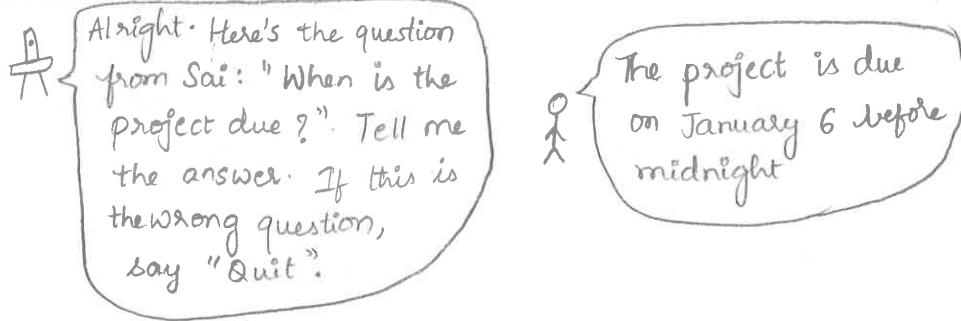
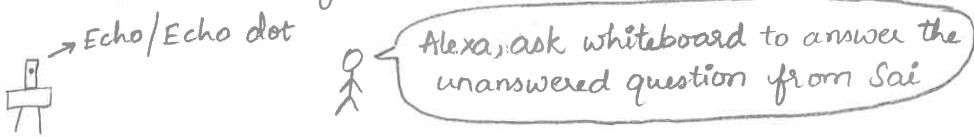


(user presses the microphone button on fire TV remote to activate)



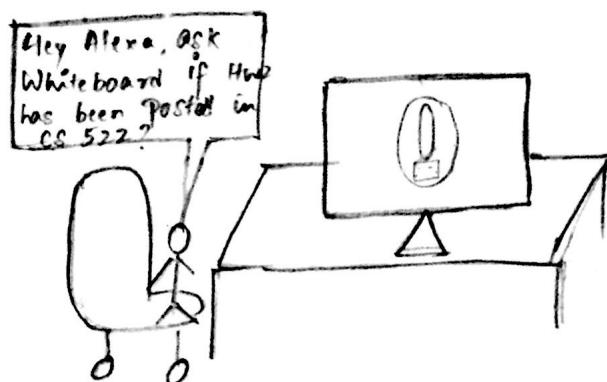
10

(user already checked unanswered questions for CS 522 on Piazza and wants to answer the question from Sai. User is in the living room)



Original Sketches: Challenge 2 - Checking for content availability

1)



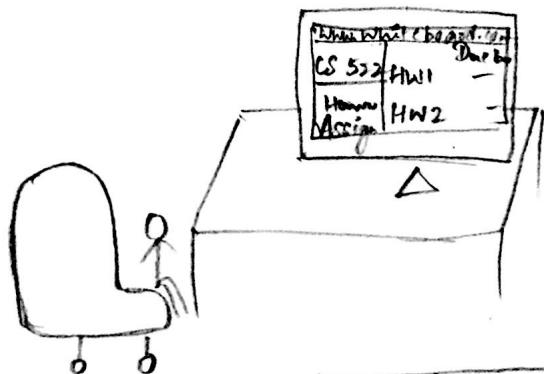
- Echo Simulator

2)



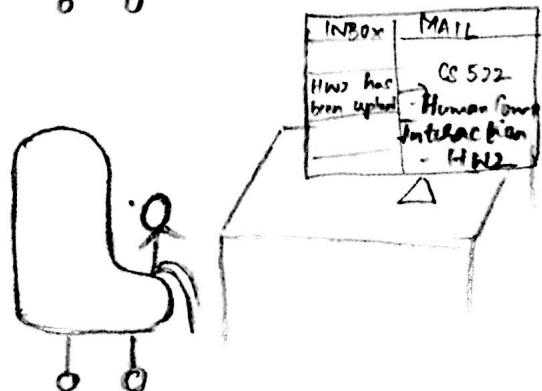
- Echo Tap - Portable
- While driving

3)



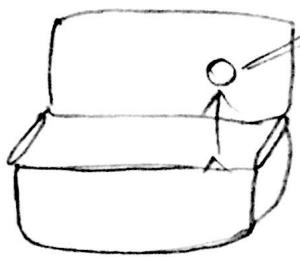
- Desktop
- Web Interface

4)



- Whiteboard
Sends a mail
notification to
the user when
Content is availb

5)

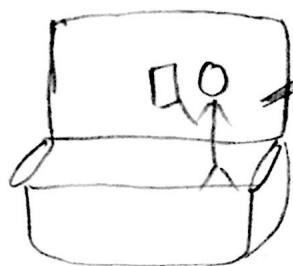


Hey Alexa, ask
Whiteboard if
HW2 has been
uploaded in
CS 522?

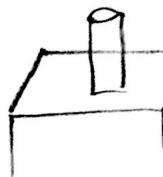


- At home, relaxing
- Using Echo

6)

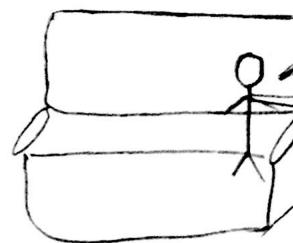


Hey Alexa, ask
Whiteboard to
send a notification
to my mobile
about HW2 in
CS 522.

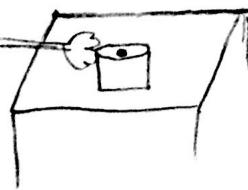


- At home, relaxing
- With mobile
in hand.

7)

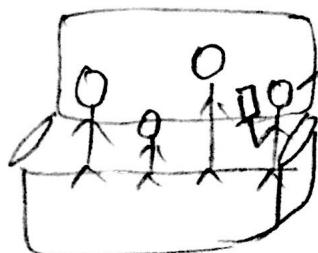


Ask Whiteboard if
HW2 has been uploaded
in CS 522.

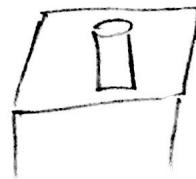


- At home
- Using Echo Dot
- No need to use
"Hey Alexa" when
button is pressed

8)

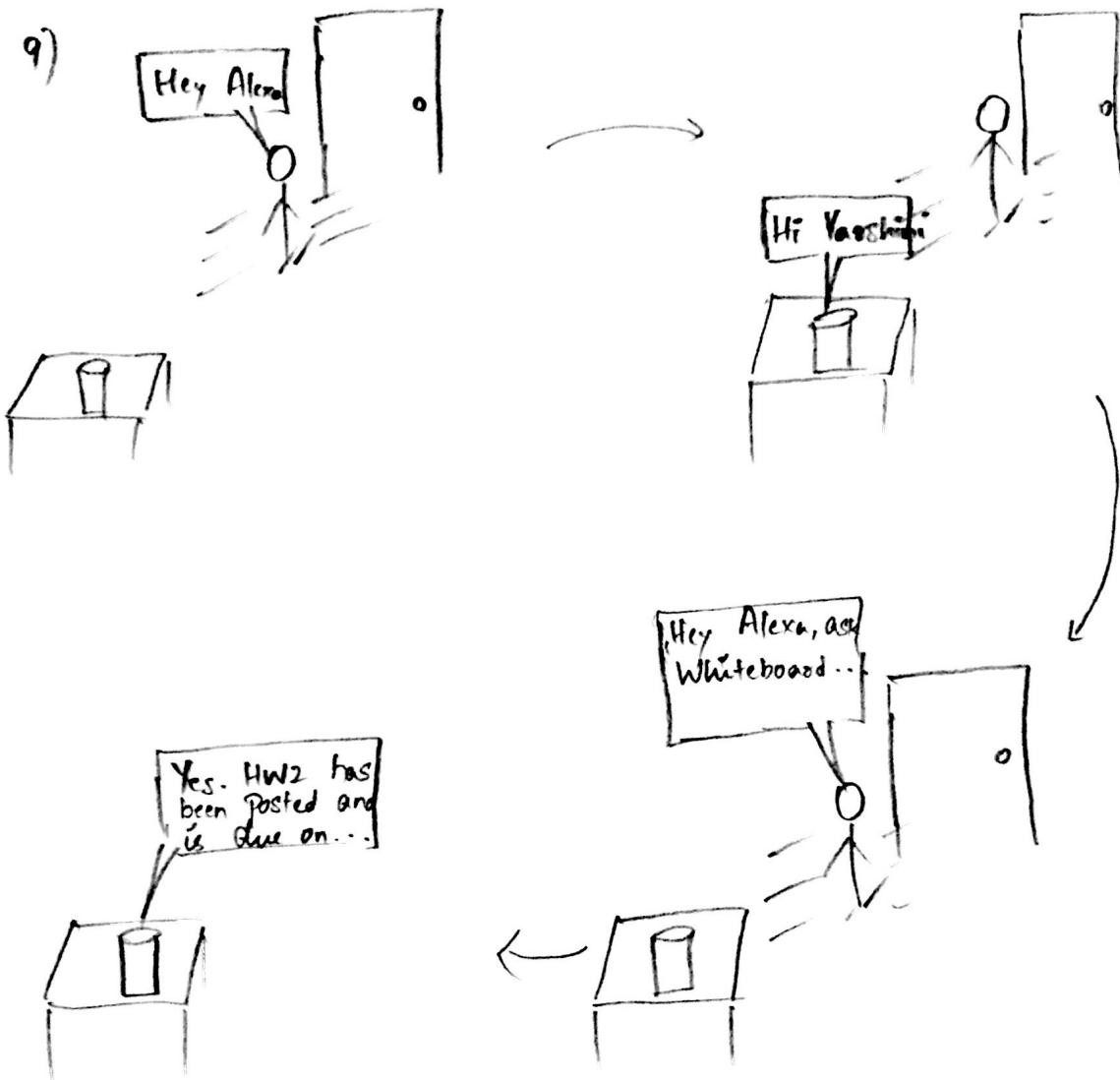


Hey Alexa, ask
Whiteboard if
HW2 has been
uploaded in CS 522



- At home
- With many
people around

9)

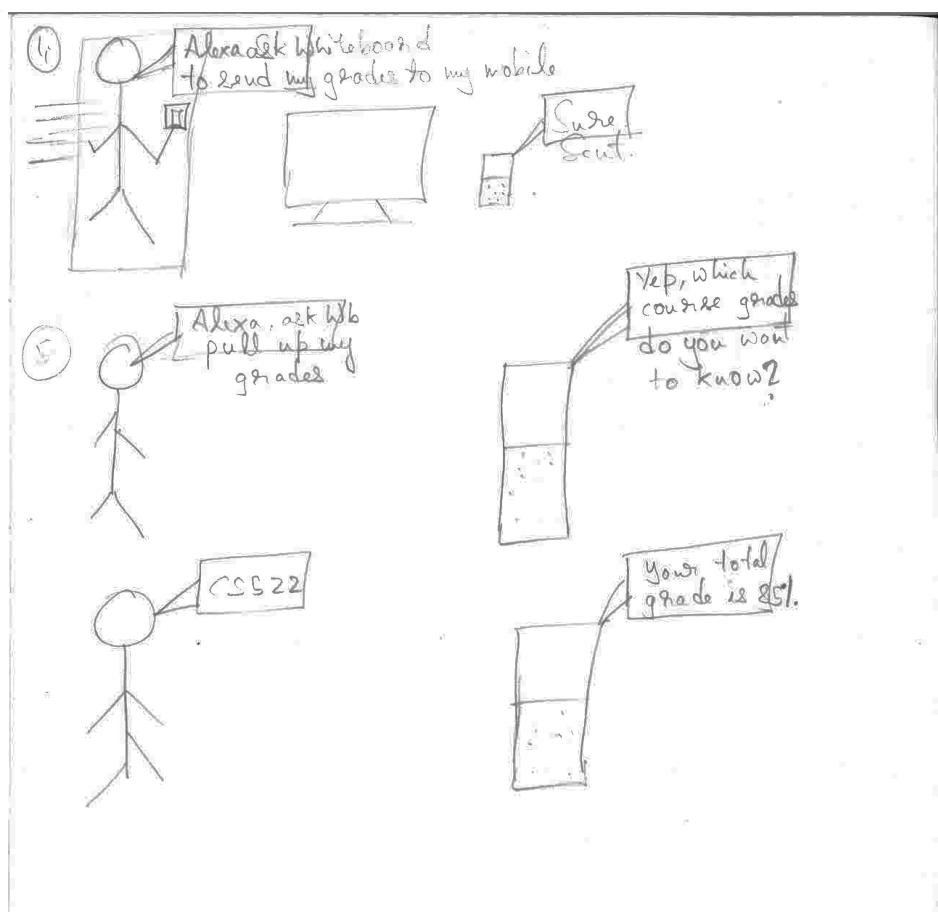
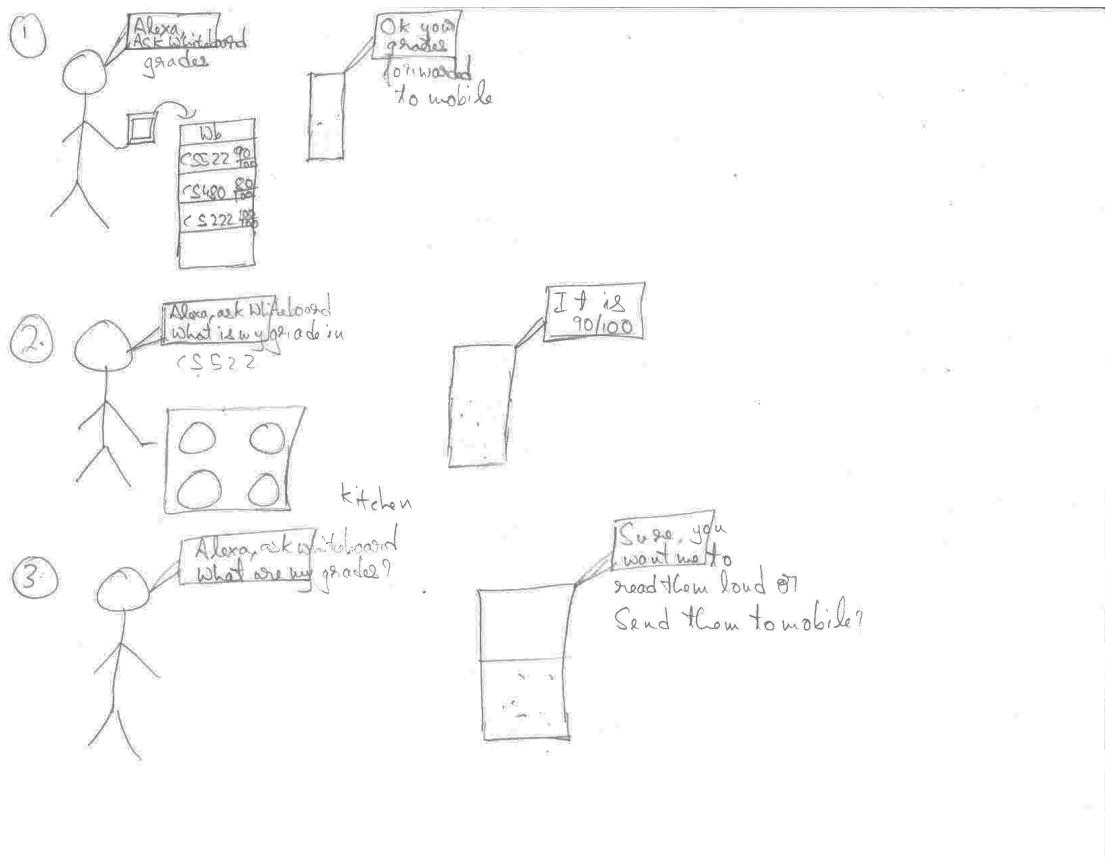


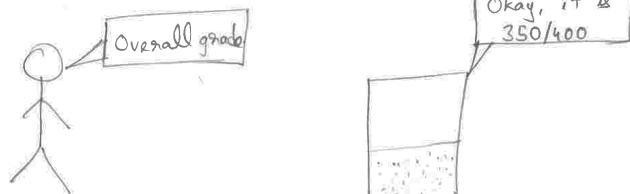
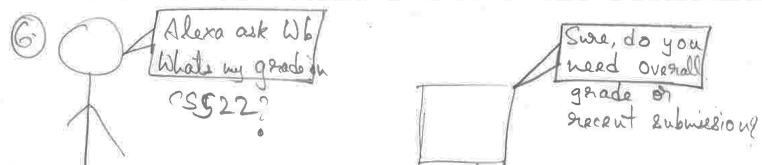
- From a distance, in a hurry
- Making sure Alexa is listening before telling the command

10)

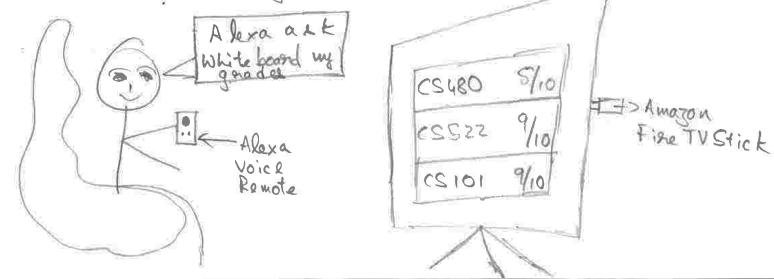


Original Sketches: Challenge 3 – Checking Grades

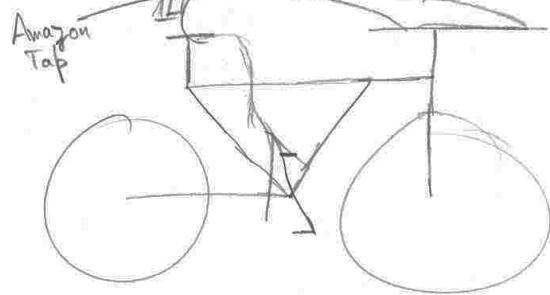




⑦ Watching TV



⑧ You have an
average of 80%
Alexa, ask whiteboard
what are my grades



⑨ At Home
Alexa ask whiteboard
how much I scored
on my midterm?

Sure, you scored
a 70 on your recent
midterm in CSS22

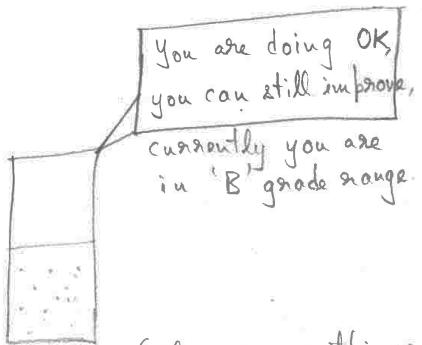
Echo Dot

(10)



Alexa, ask Whiteboard
How am I doing in 522?

At home



(Alexa, knows things like class averages
(AI) Alexa can process all grade information
to give a overall summary of results)

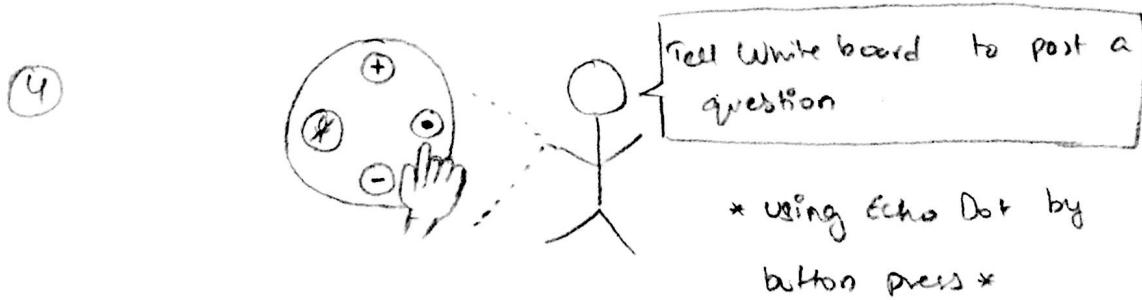
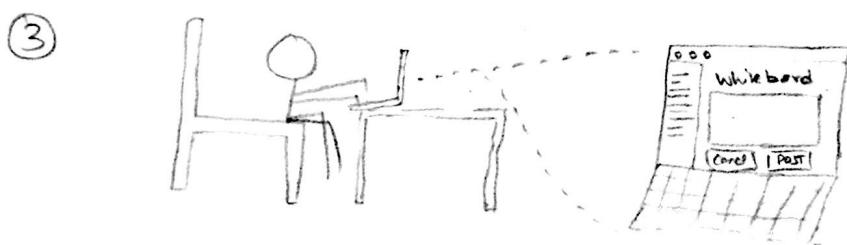
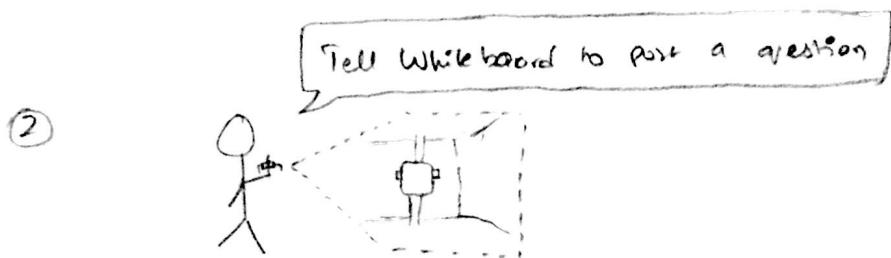
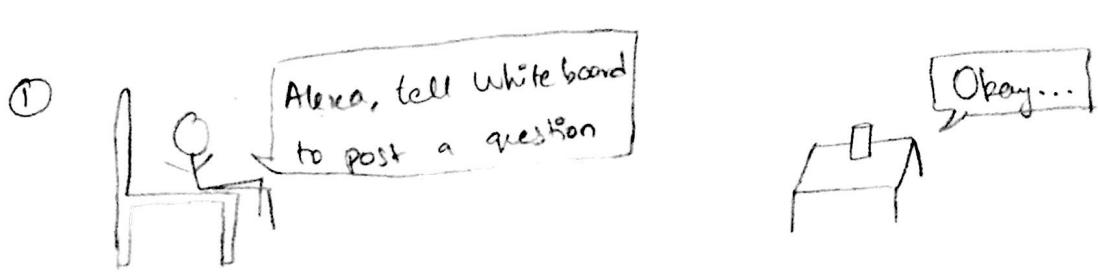
(11)



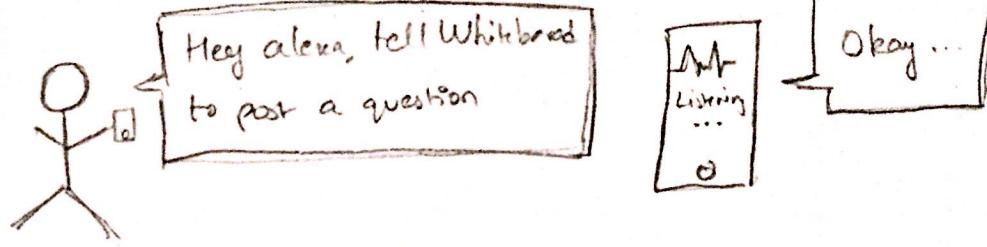
Alexa, Were the
mid term grades
for 522 posted?



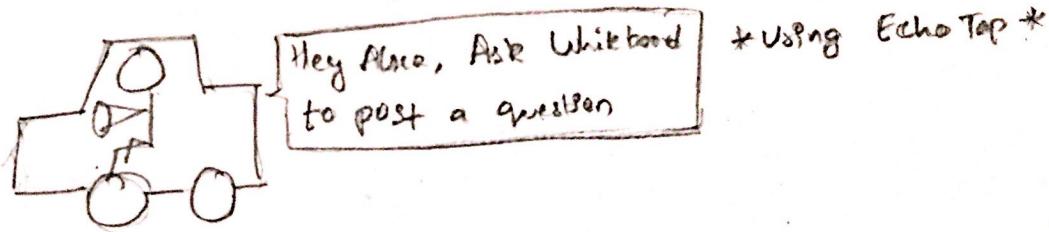
Original Sketches: Challenge 4 – Post a question



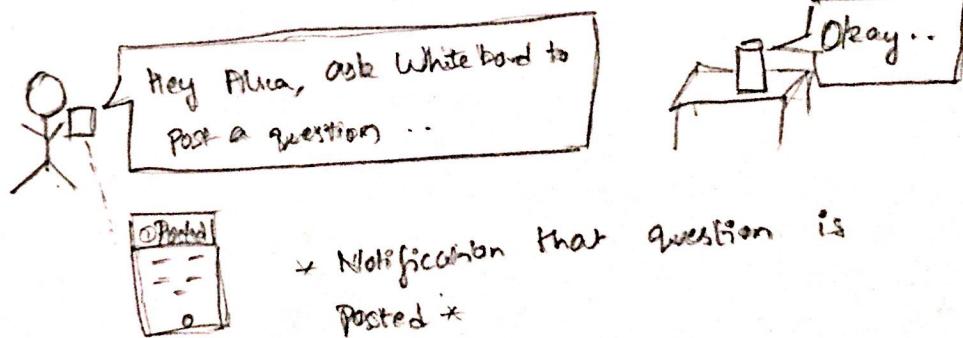
⑤



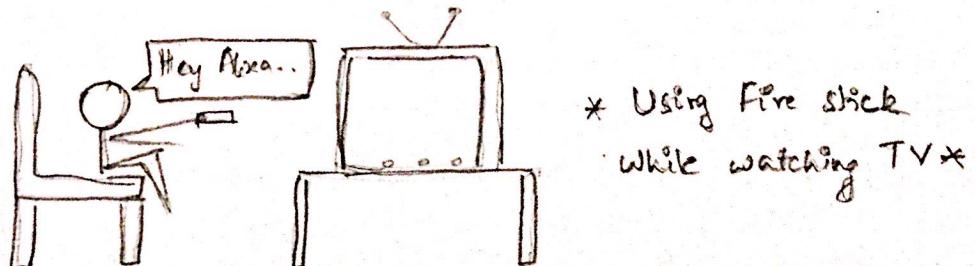
⑥



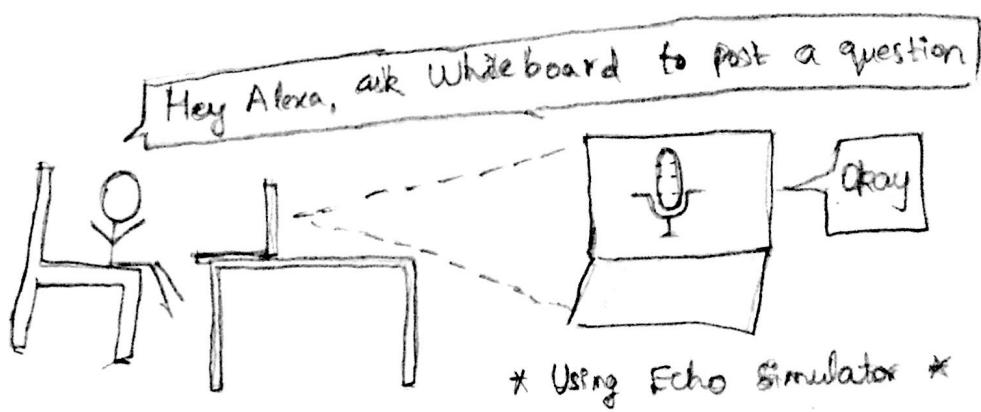
⑦



⑧



⑨



⑩

