



FlunkLESS

BETTER THAN JUST BEING THERE

VLAD BAKHURINSKY ♦ MICHELLE WANG
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MEENA KAUSHIK ♦ HUI PING LEE
LUCAS DEPAULA ♦ ALEX PETERSON



FACE-TO-FACE?

QUESTION:
HOW DO WE DIRECT
STUDENTS ATTENTION TO
THE LECTURE?

ANSWER: FlunkLESS

- Virtual space to ask questions, post comments and share links during lecture
- Enables active participation of multiple students at the same time

WHY

I'm not brave enough to ask my TA's or my professors the questions I ask myself during lecture.

UCSD Confessions May 29

Like · Comment · Share

92 people like this

2 shares

Jerry Zhao Thats what office hours, email, piazza, etc are for

Roxanna Shafizadeh I read this as "pizza" lol!

Khalid Azizi To put things in perspective, I like to think that my professors were once undergrad students who asked a bunch of questions and that today they have a Ph.D for that reason....makes it much easier. Stupid questions are a plus if it helps you understand something

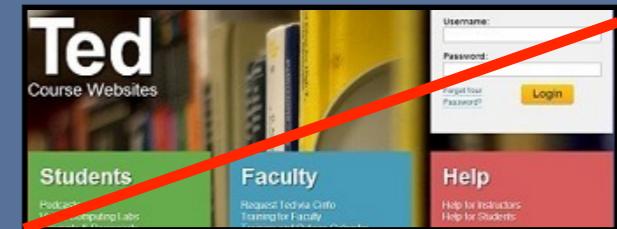
Inez Qingyue Zhou I usually think about the amount of my tuition then I'll be brave

Trey Kingston Well if you're good with a spatula you don't need to be brave. You can never ask too many questions. Just tell yourself that.

John Franke For a second I was excited and thought you were making a spongebob reference to krabby pattys

Write a reply...

Write a comment...



INTERVIEWS 1.0

- 12 interviews:
 - 2 Professors
 - 4 Teaching Assistants
 - 6 Students

- Semi-structured
- Lasted about 1 hr
- Field notes
- Screen recording
- Video recording

- Goal: Gather information about the way people use Facebook and other communication platforms for academic purposes



AFFINITY WALL 1.0

4

3rd order

12

2nd order

32

1st order

215

data points

Communication

Finding

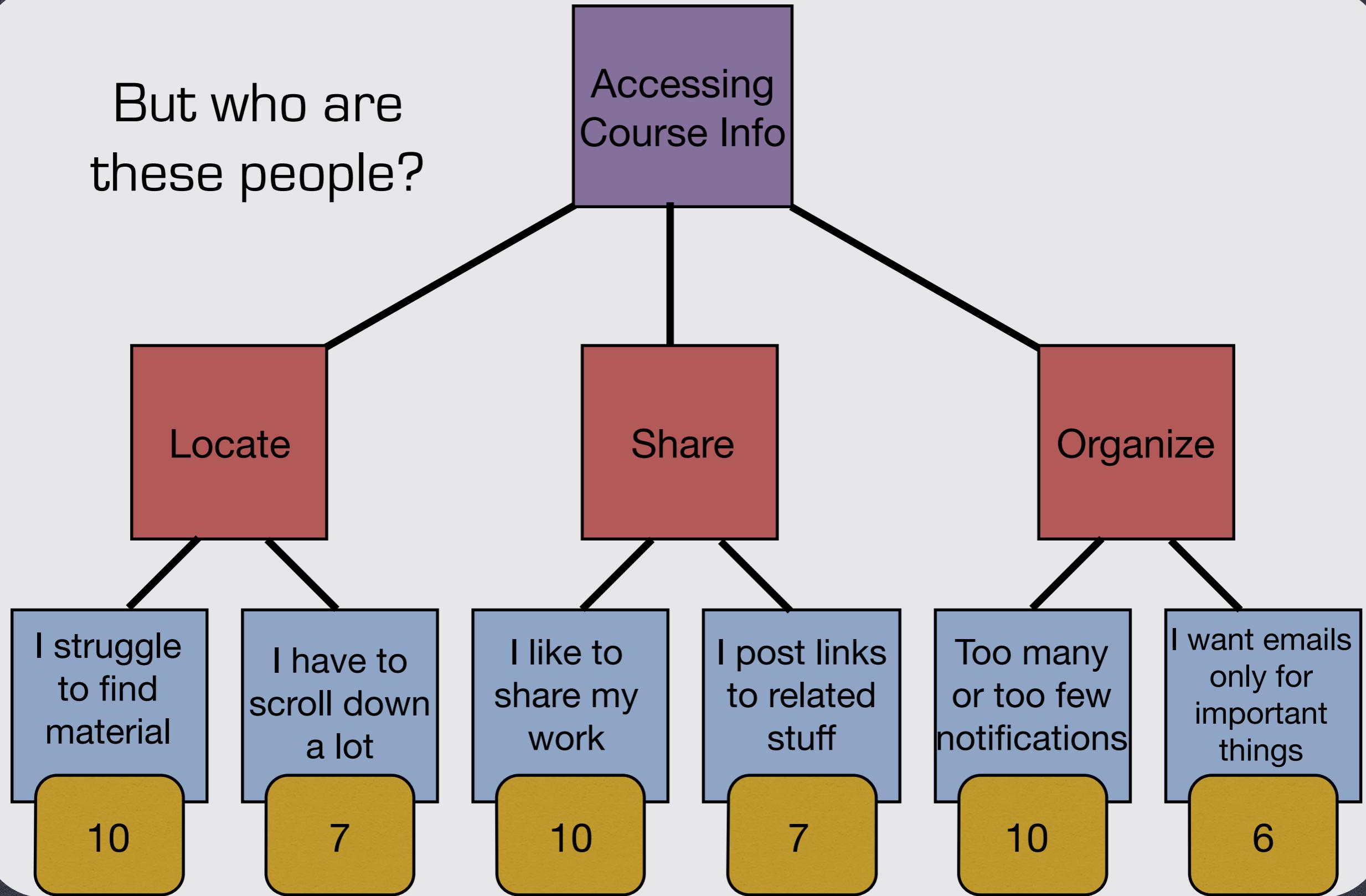
Socializing

Usability



AFFINITY WALL 1.0

But who are
these people?



PERSONAS

Prof. Goodman



“You can take the horses to the water, but you cannot make them drink.”

TA Stephanie



“I have my own classes and research, so I hate wasting time answering the same question over and over.”

John Wannapass



“I just want to know the information I need to get a good grade.”

MAIN INSIGHTS 1.0



I don't want to mix my personal and academic lives.

TA02: “[Students] are worried that professors will look into their accounts.”



I like to share my ideas, my work, and other resources.

SO1: “Students are selfless in the Facebook group chat.”



I want my students to engage more with the material.

PO1: “It becomes challenging when you have more than 200 students in classroom.”

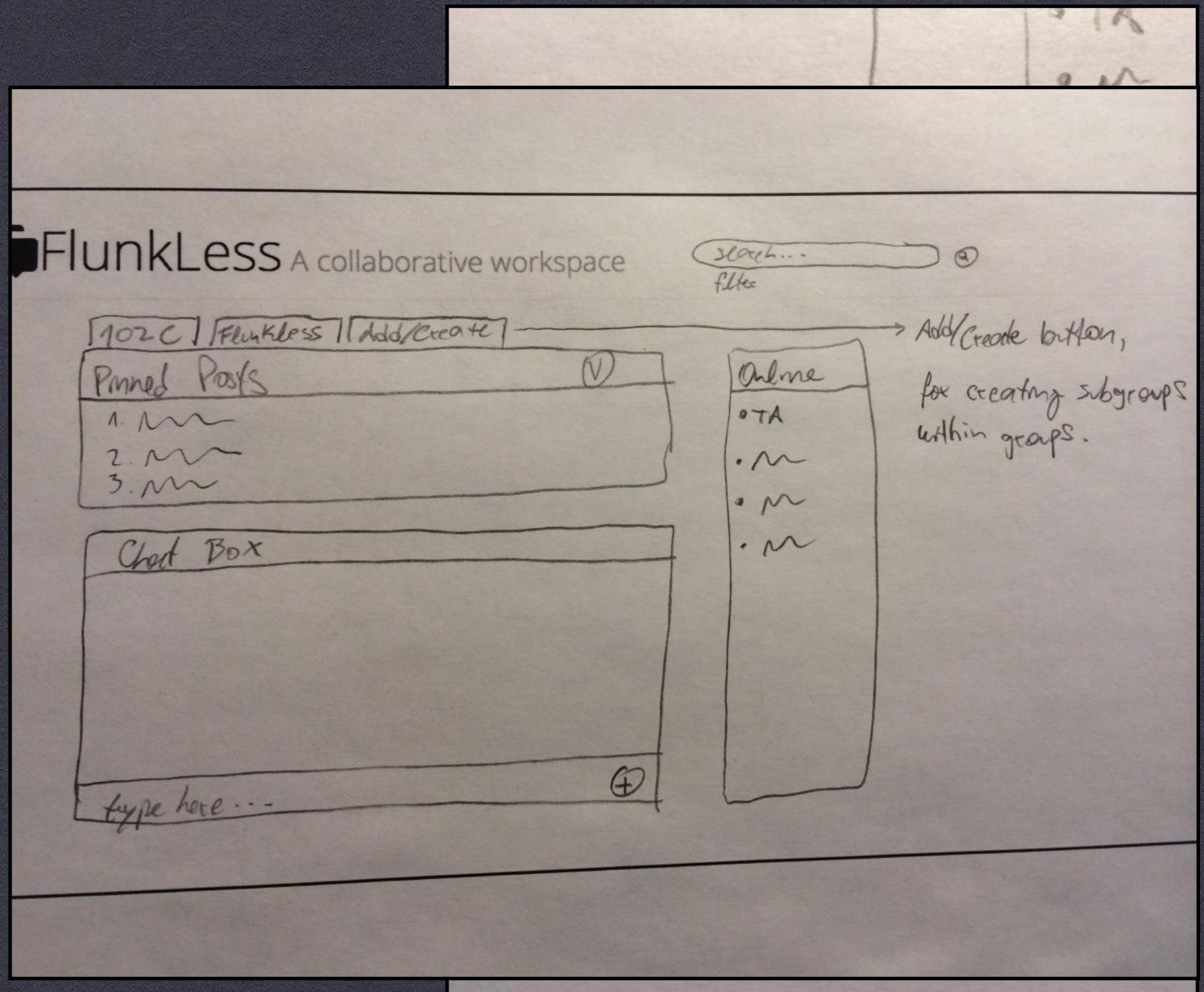
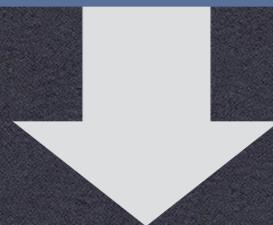
RESULTS 1.0

Insights

Design Ideas

Visioning

Prototypes



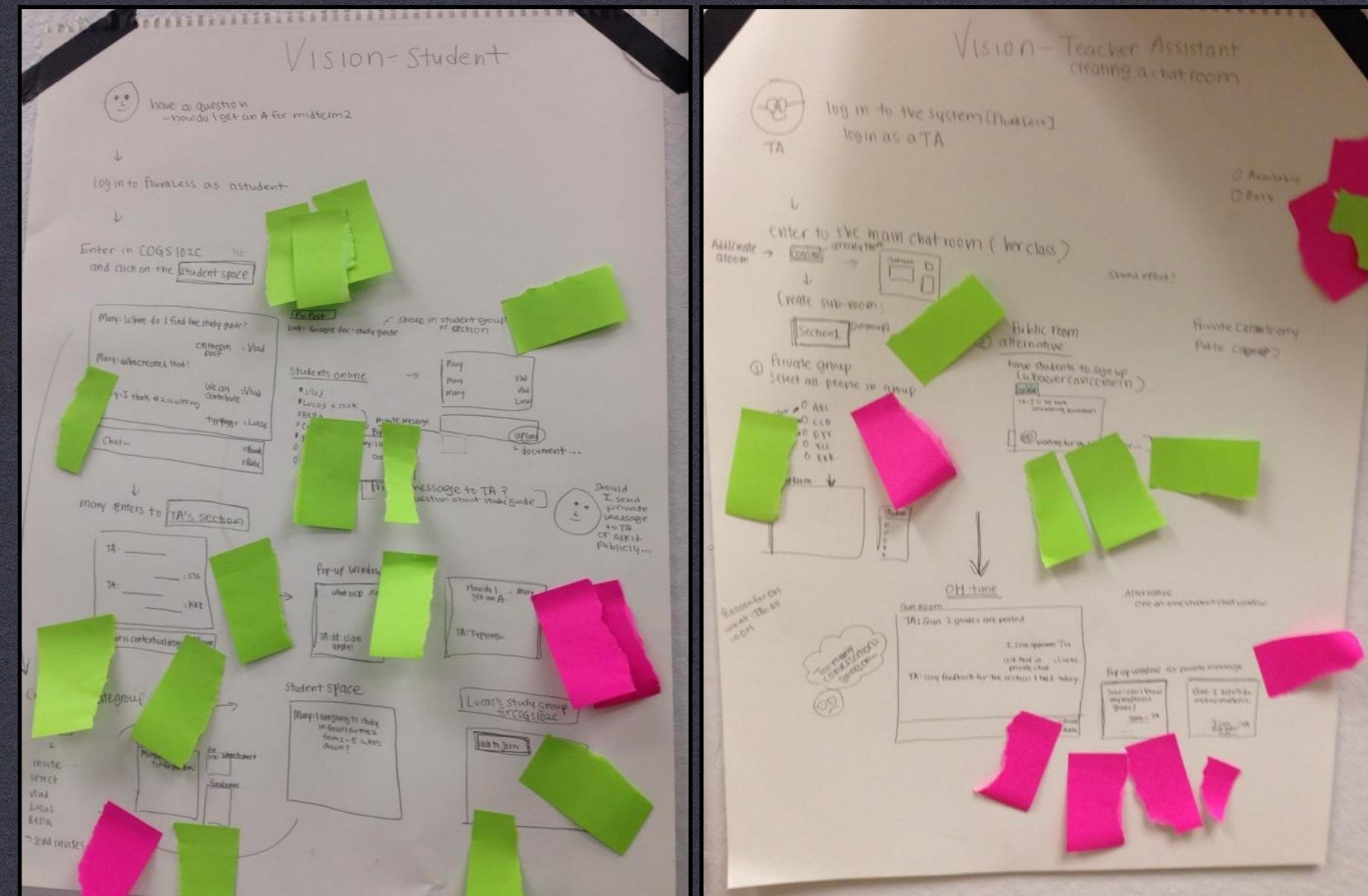
RESULTS 1.0

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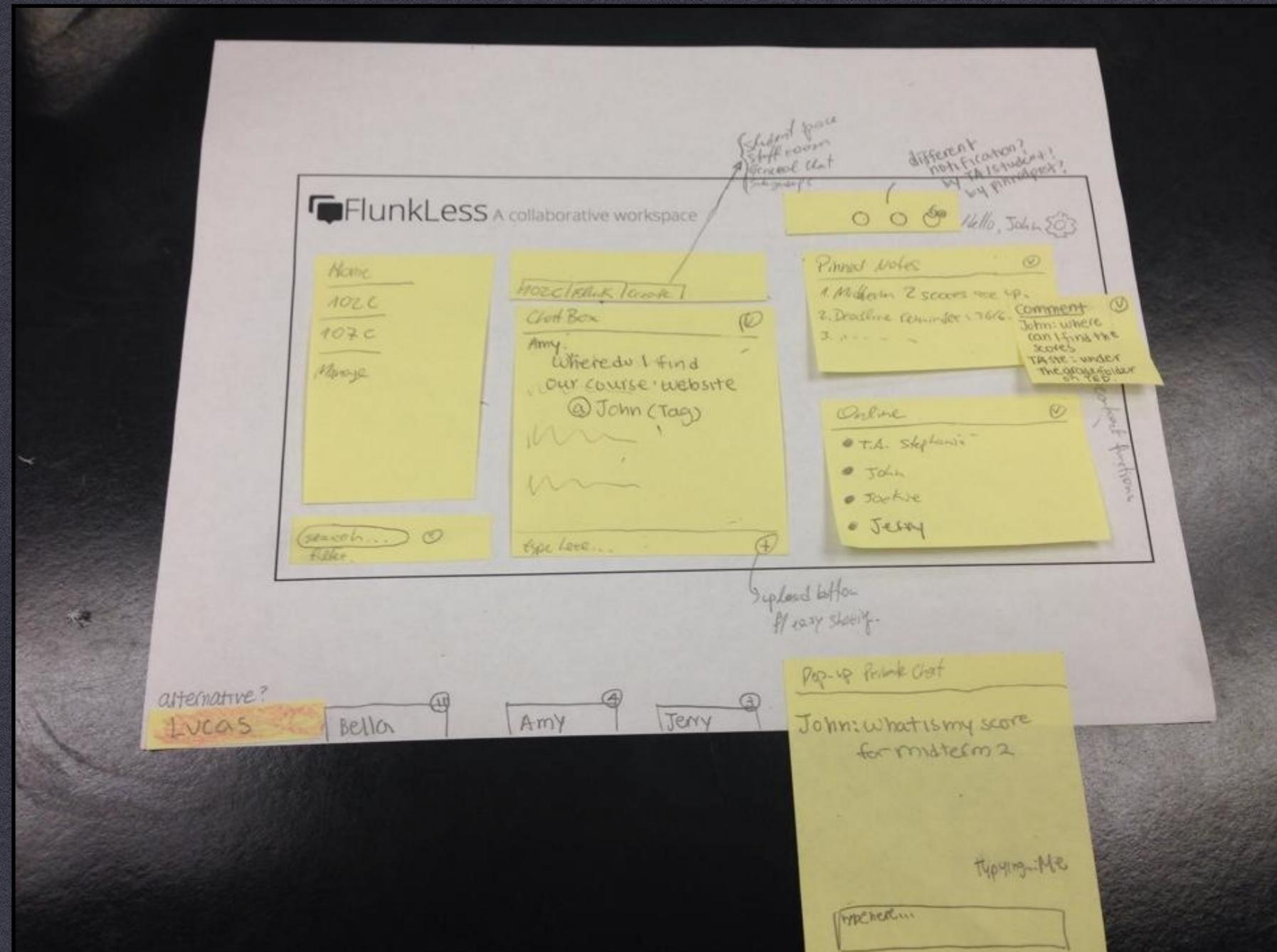
RESULTS 1.0

Insights

Design Ideas

Visioning

Prototypes



RESULTS 1.0

Insights

Design Ideas

Visioning

Prototypes



The screenshot shows a web browser window for the URL flunkless1.herokuapp.com. The page title is "FlunkLess". The top navigation bar includes links for "FlunkLess", "Chat", and "Manage Groups", along with a user greeting "Hello, Lucas Funkeinstein (Johnn)" and a notification count of "0". On the left, a sidebar titled "Your Rooms" lists "COGS 101B", "COGS - 121. Human Computer Interaction Programming Studio", "COGS 107C", and a "Manage Rooms" link. The main content area features a blue header "Important Posts" with a "Show:" dropdown menu set to "Announcements" and buttons for "Questions" and "Links". Below this is a blue banner for "COGS 101B - Learning, Memory, and Attention". At the bottom of the page is a chat input field with "Enter a Message...", a "Send" button, and a "Submit" button. To the right, a sidebar titled "People Online" shows a single user "Johnn" (represented by a mummy icon) and a "Leave Room" link.

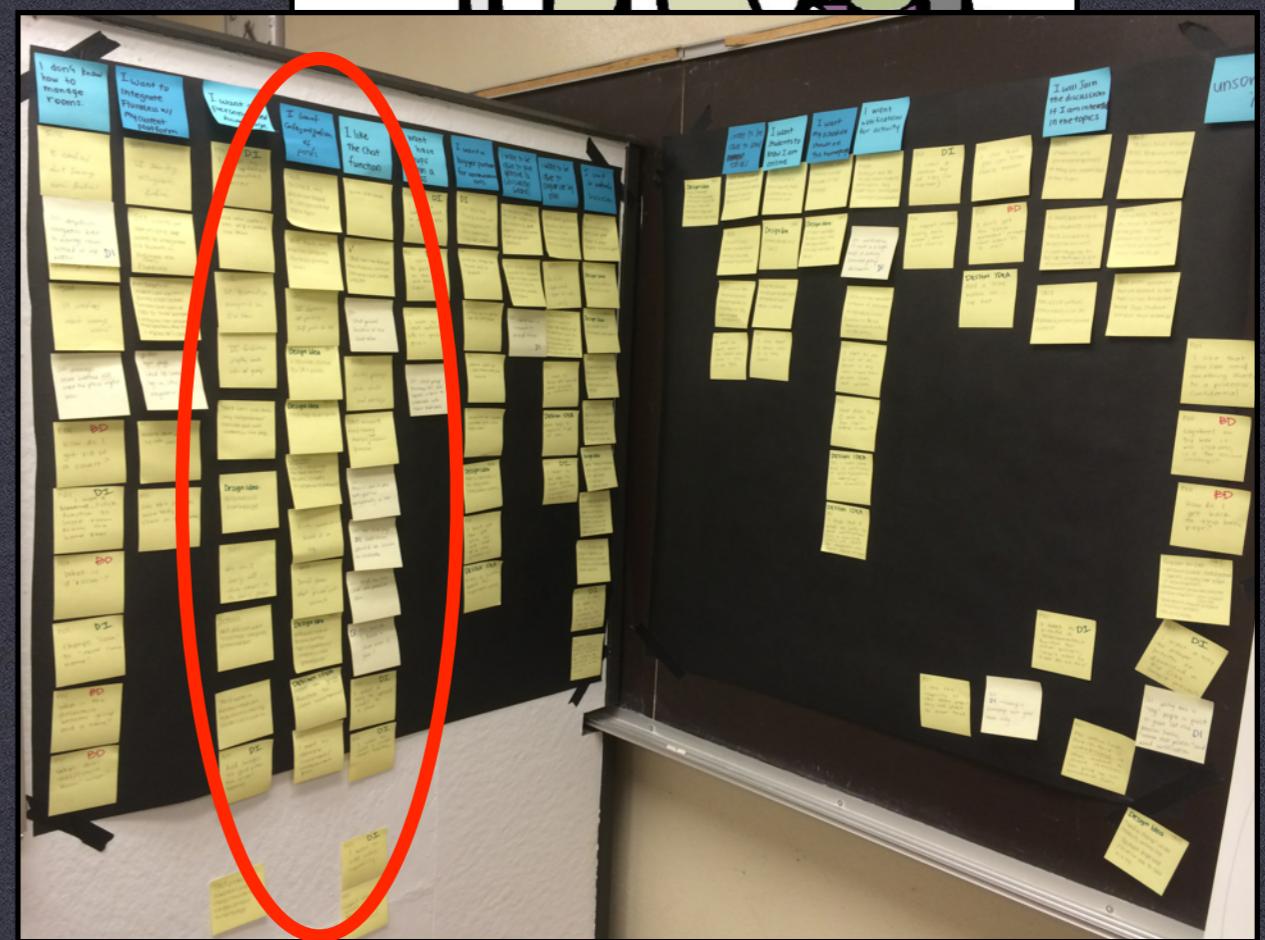
121 Working Prototype

INTERVIEWS 2.0

- 6 interviews:
 - 2 Professors
 - 1 Teaching Assistant
 - 3 Students

- Semi-structured
 - Half-hour in average
 - Field notes
 - Paper prototype testing
 - 121 prototype testing

- Goal: Gather feedback on prototypes and evaluate idea of virtual office hours.



MAIN INSIGHTS 2.0



Student: "Is that something else for me to do after class?"



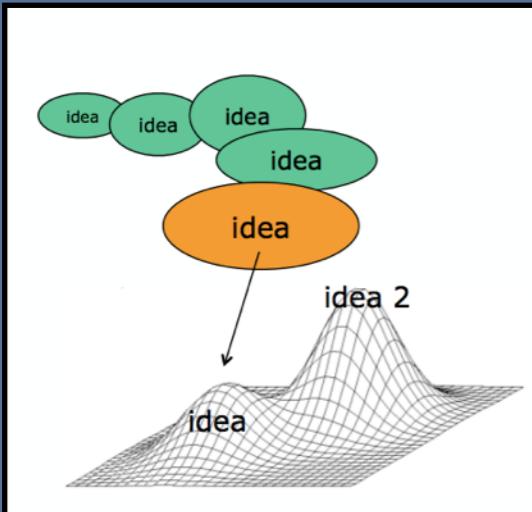
TA: "I don't see my students using it."



Prof: "I much prefer face-to-face interaction."

Interviewer: "What if you could use it during lecture?"

Prof: "Then I'd use that in a heartbeat."



D. Schön: "The situation talks back, the practitioner listens, and [...] reframes the situation once again."

The Reflective Practitioner

RE-FRAMING

Beyond Being There (Hollan et. al. 1992):

“To do that [solve telecommunication problem] requires tools that go beyond being there. To create such tools, we suggest framing the problem in terms of needs, media, and mechanisms. The goal then becomes identifying needs which are not ideally met in the medium of physical proximity...”

RE-FRAMING

Need:

Support communication during lecture.

Media: A virtual wall space

Strengths: multiparty, real-time, text-based
(silent)

Mechanisms:

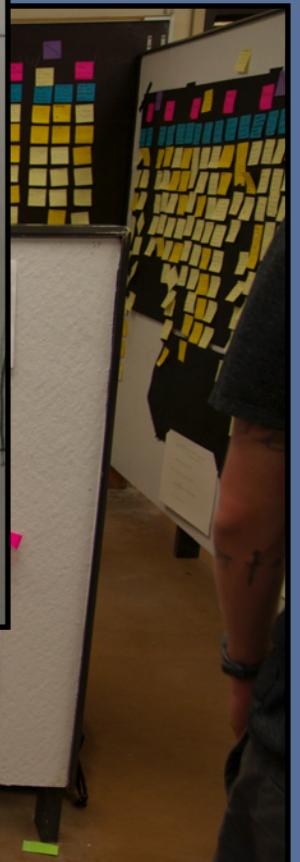
Guiding discussion and gathering feedback

FLARE



A screenshot of the FLARE online wall interface. At the top left is a sidebar titled "My Rooms" with "COGS 102C", "COGS 11", "BILD 18", and "CSE 7". The main area shows a post from "Flunk Less" with the title "COGS102C Online Wall". It includes a search bar, a filter by dropdown menu, and a "Return Home" button. A yellow sticky note is pinned to the post. Below the post is a list of comments from users like Bella, Jack, Alex, Amy, April, Nelson, and Nina, each with a timestamp and a "Show comments" link. At the bottom is a text input field labeled "type here...".

A screenshot of the FLARE announcement interface. It features a sidebar with "filter by", "date", "who", and "Topic" dropdown menus. A "Search" bar is at the top right. A "Return Home" button is in the top right corner. The main content area is titled "Announcement" and lists an announcement from "Prof. John" with three bullet points: "Lecture outline", "Guest speaker for next Tuesday", and "I would like to hear ideas about Dcontext design.". Below this is a "Check-Point" section with five questions (Q1-Q5) and a bar chart. The chart has four bars labeled A, B, C, and D, with heights corresponding to the answers given for Q1. The questions are: Q1. What is contextual design? Q2. What can be used as a cultural model? Q3. Q4. Q5.



FOCUS

Ask Away:

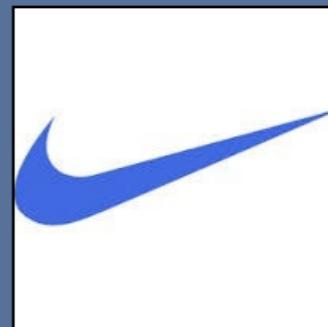


Post your questions as they come to mind.



S02: “Sometimes the class is ending or the professor is not welcoming. Asking questions can get tricky.”

Just share it:



Share related links you stumble upon, or maybe pictures of your notes.

S03: “I like to share links to related material.”

FOCUS

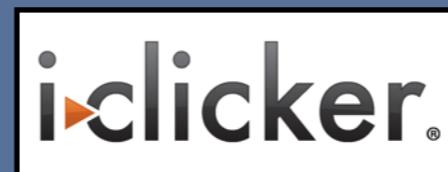
Vote:



Popular questions go to the top, creating priority ranking.

TA01: “I have to keep scrolling down to find important issues.”

Checkpoints:



For professors to gather instant feedback on students' progress.

P02: “I want to know how my students are doing.”

WALK-THROUGH

FlunkLESS
BETTER THAN JUST BEING THERE

Welcome

Enter Name

Log in



Login with Facebook



Sign in with Google



Login With Twitter

Summary of Class Activities

My Classrooms
COGS102C
COGS11
BILD18
CSE7
Add More

- COGS102C

56 93 

Here is an interesting article that talks about "beyond being there."
- COGS11

95 112 

The use of mobile phone can lead to Alzheimer's disease?
- BILD18

13 122 

I think the speak we have today has some contradicting arguments here...
- CSE7

22 56 

How do I install matlab on mac?

You Posted...

- 1   For the clean air act are the green house gases included? BILD18
- 2   Here is the link to the project paper for "Beyond Being There." COGS102C
- 3   Here is my note for today's lecture. COGS102C
- 4   Phantom limb is the sensation that an amputated or missing limb... COGS11
- 5   I think midterm 2 was easier than midterm 1. BILD18

FlunkLESS

BETTER THAN JUST BEING THERE

Hello, John



Enter room name



My Classrooms

COGS102C

COGS11

BILD18

CSE7

Add More



COGS 115 - Neurological
Development and Cognitive
Change



BILD 1 - The Cell



BILD 2 - Multicellular Life



BILD 3 - Organismic and
Evolutionary Biology



CHEM 6A - General Chemistry I



CHEM 6B - General Chemistry II



CHEM 6C - General Chemistry III



CSE 100 - Advanced Data
Structures



CSE 101 - Design and Analysis of
Algorithm



CSE 105 - Intro to Theory of
Computation



CSE 11 - Introduction to
Computer Science and Object-
Oriented Programming: Java



CSE 110 - Software Engineering

filter by
date
who
topic

 search

COGS102C Wall Space

My Classrooms

COGS102C

COGS11

BILD18

CSE7

Add More

- 1   93

Lucas
Here is an interesting article that talks about "Beyond Being There." [link](#)
19 comments
- 2   58

Bella
I don't get what is "beyond being there."

Jack: same here	
Alex: I think it means...	
Amy: this is confusing!	
write a comment...	
- 3   43

Jack
I think this is a better explanation for context design.
[read more...](#)
9 comments
- 4   38

April
I don't see the difference between storyboarding and visioning.
3 comments
- 5   22

Nelson
I think midterm 2 was too hard.
10 comments
- 6   13

Nina
I don't know where to turn in my progress report.
1 comment

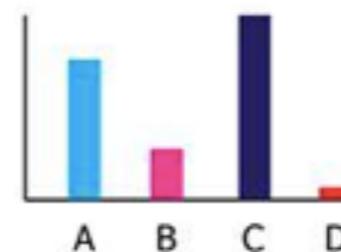
type here...

Announcement

- Lecture Outline
- Guest speaker coming next Tuesday
- I would like to hear ideas about context design

Check-Points

Q1 What is contextual design?



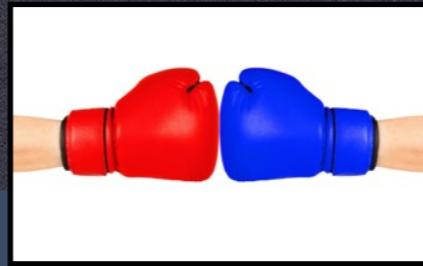


Q2 What can be used as a cultural model?

- A. The use of iPhone
- B. Language
- C. Gender difference
- D. All of the above



COMPETITIVE ANALYSIS



7 X 0

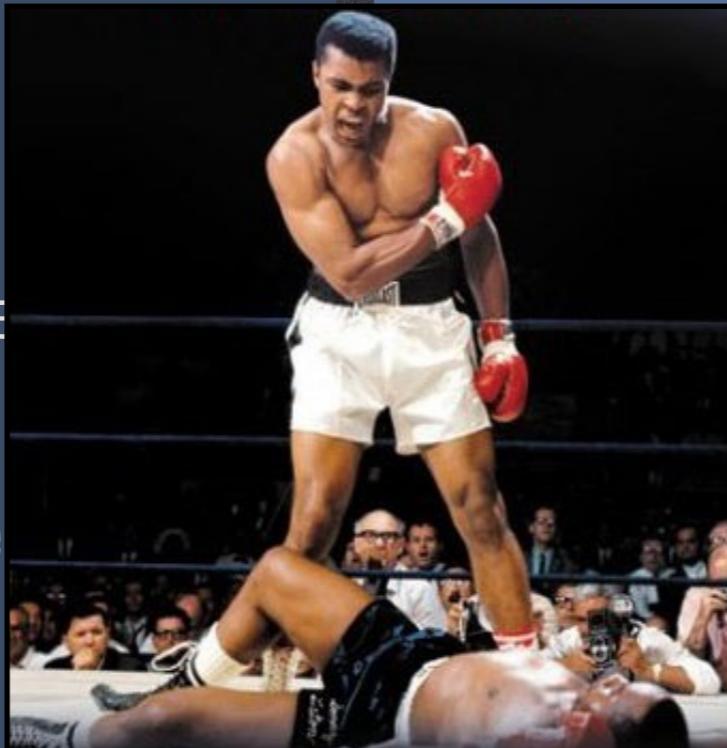
FlunkLESS
BETTER THAN JUST BEING THERE

\$ 0.00 FREE

No additional device

Full keyboard + Screen

Everyone takes part



\$ 47.99 + tax
(student version)

frequency system

A-E buttons

Only professors
gets to ask questions

- + Posting links
- + Voting system
- + Saves history

SIGNIFICANCE

- Supporting active learning strategies in large classrooms
- Taking advantage that students already use digital devices during lecture
- Technology as supplement, not substitute
- Amplifying the student's voice in their education

FUTURE DIRECTIONS

- More in depth ethnographic study, focusing on the use of digital devices during lecture
- Incorporating quizzes and exams into digital form
- Syncing FlunkLess to lecture slides
- Putting the data traces from students to good use

THANKS!

- All informants for participation
- Prof. Jim Hollan
- TA. Melody
- All other TAs
- 102c Classmates
- 121 Teammates