FeedKnack

“Transforming real-time education data into insights for students and teachers”

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teacher
students
lectures
group
sharing
learning
team
focus
media
questions
shy
incentive
professor
project
engagement
ask
improvement
analysis
information
feedback
technology
iClicker
interest
confusion
work
data
answer

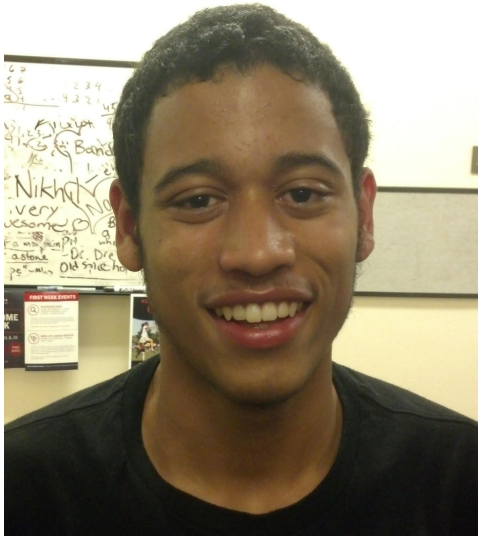
Problem and Solution

Contextual Inquiry #1

Irving G.

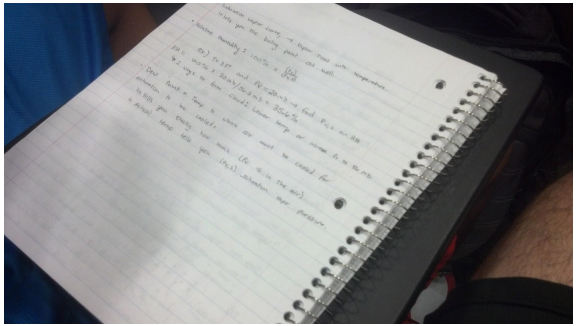
- software engineer at Google
- uses MOOCs

Contextual Inquiry #2



Kyle G.

- freshman at Stanford
- actively participates in lecture



Contextual Inquiry #3

Cynthia Lee

- Lecturer at Stanford
- uses iClicker questions during class

Major Takeaways

- range in comfort level
- multitasking
- confidence in current feedback system

Task Analysis

- Who?
- Current tasks?
- Desired tasks?

Task Analysis

- How are tasks learned?
- Where?
- Customer and data relationship?

Task Analysis

- Other tools?
- How do users communicate?
- Time constraints

Task Analysis

- How often are tasks performed?
- What happens when things go wrong?

Student Input

Students can ask questions and indicate confusion during lecture

Improve Lectures

Lecturers can improve classes based on feedback

Pose Questions

Enable lecturers to instantly pose questions

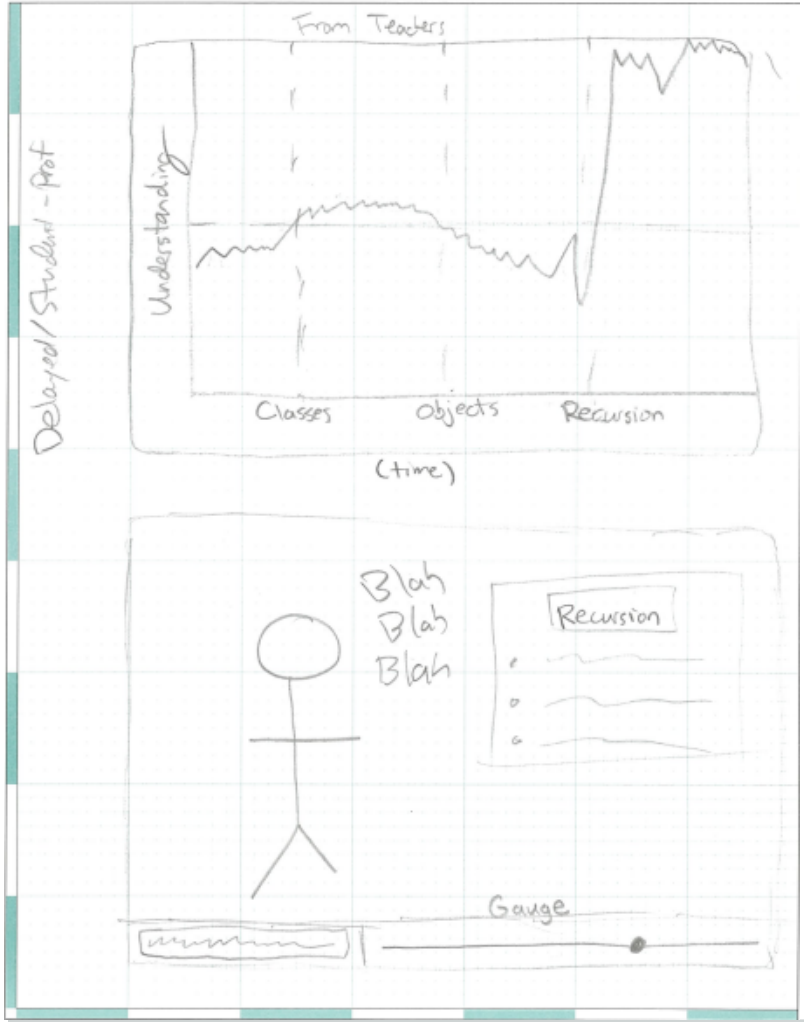
Lecture Feedback w/Data Collection

Goals:

- give immediate and long term feedback both to students and professors during live or online lectures

Application will allow students to:

- ask and answer questions
- indicate any sort of confusion during a lecture
- ultimately improve lectures for both parties



Date: October 8, 2014
class: PSYCH 30
Today's Topics
- image formation
- photoreceptors
- data compression

student view

* students can't see how many students "thumbs up" or "thumbs down" each topic.

Professor uploads topics for lecture before class. Students "thumbs up" or "thumbs down" topics as they are being presented based on understanding.

Date: October 8, 2014
Class: PSYCH 30
Today's Topics
- image formation — Got It! 71 / what?! 8
- photoreceptors — Got It! 13 / what?! 66
- data compression

Professor view

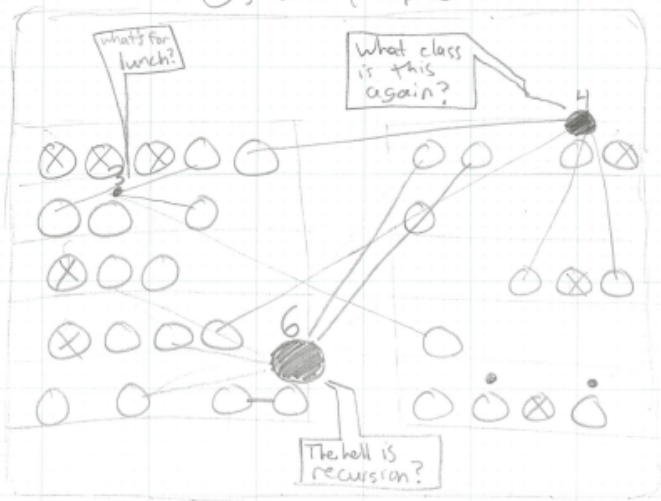
Real-Time Question Scanner

Goals:

- help the lecturer actually see when students have questions

Application:

- students have the ability to ask questions with a device, and other students can upvote certain questions



Perspective of Lecturer

- Dots are Questions, with bigger questions being ones more students in class have
- ⊗ means zoned-out

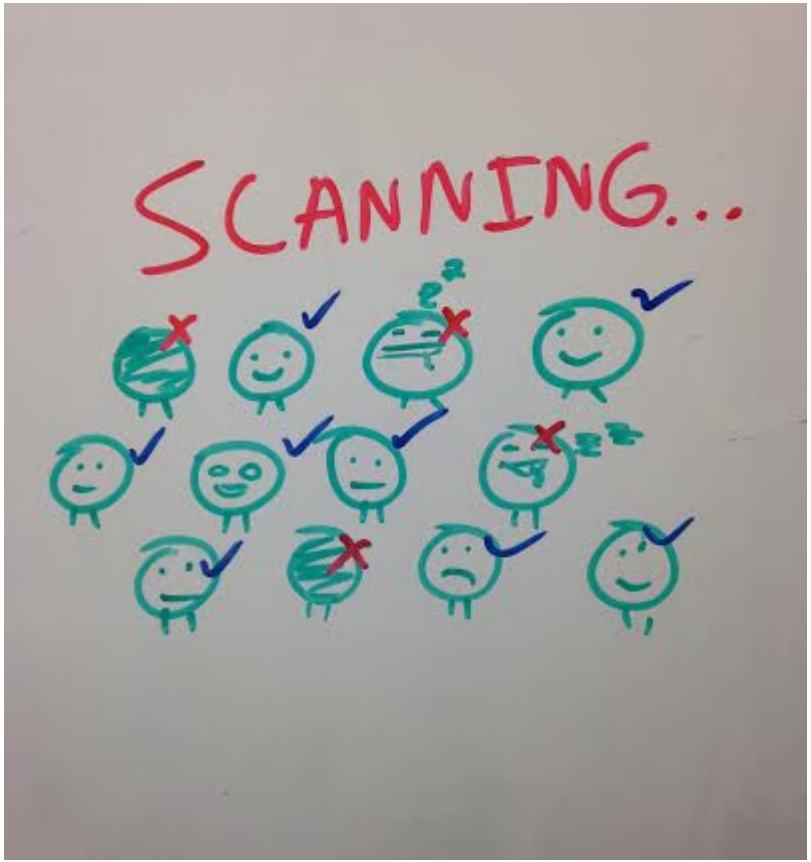
Attentiveness Scanner

Goal:

- allow the lecturer to know the students' engagement level
- incentivize students to be engaged

Application:

- scan the room and determine attentiveness of the students
- provide points to attentive students and deduct points from non-attentive students


SCANNING...

Summary

Need

- better communication between lecturer and student

Goals

- improve lectures
- enable student input
- allow lecturers to pose questions

Works Cited

http://tenntlc-utk-edu.wpengine.netdna-cdn.com/files/2013/03/MP900422591.jpg

http://images.inmagine.com/400nwm/imagesource/is0266jn0/is0266n3b.jpg

http://blog.roblox.com/wp-content/uploads/2013/06/Thumbs-Up-and-Down.png

http://www.universitybusiness.com/sites/default/files/field/image/M-Final_TTYSU1461.jpg