

# HCI design studio

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# Fifteen designs

In which the professor starts class *en media res*

# Communicate with a quadrotor drone

Suppose the drone is autonomous, has a camera, projector, mic, & speakers

Generate and sketch out fifteen ideas each

You have seven minutes: go!



# Share your ideas with your table

Show your favorite two ideas  
Each table nominates one to share with the class  
Your table can't repeat previous tables' ideas

# Studios and instructors

a.k.a. character select screen

# The structure of studio sessions

- This class is called **HCI Design Studio**. Studio forms the centerpiece of the class.
- You will share, critique, and be critiqued each week as part of your project deliverables
- **Design critique:** focused feedback to guide your ideation and prototyping process
  - More on this soon
  - This isn't routine feedback: it's guidance intended to push you
  - Ignore critique at your peril

# Introductions

Did you know: the university officially calls them CAs?

# Michael Bernstein

- Assistant Professor,  
Computer Science
- Co-director of the  
Stanford HCI Group



# Studio Instructors

- Helena Roeber
  - Created and led Android UX research
- Julie Stanford
  - d.school lecturer and design consultant
- Bob Ryskamp
  - UI lead for Google Glass

# Studio Instructors

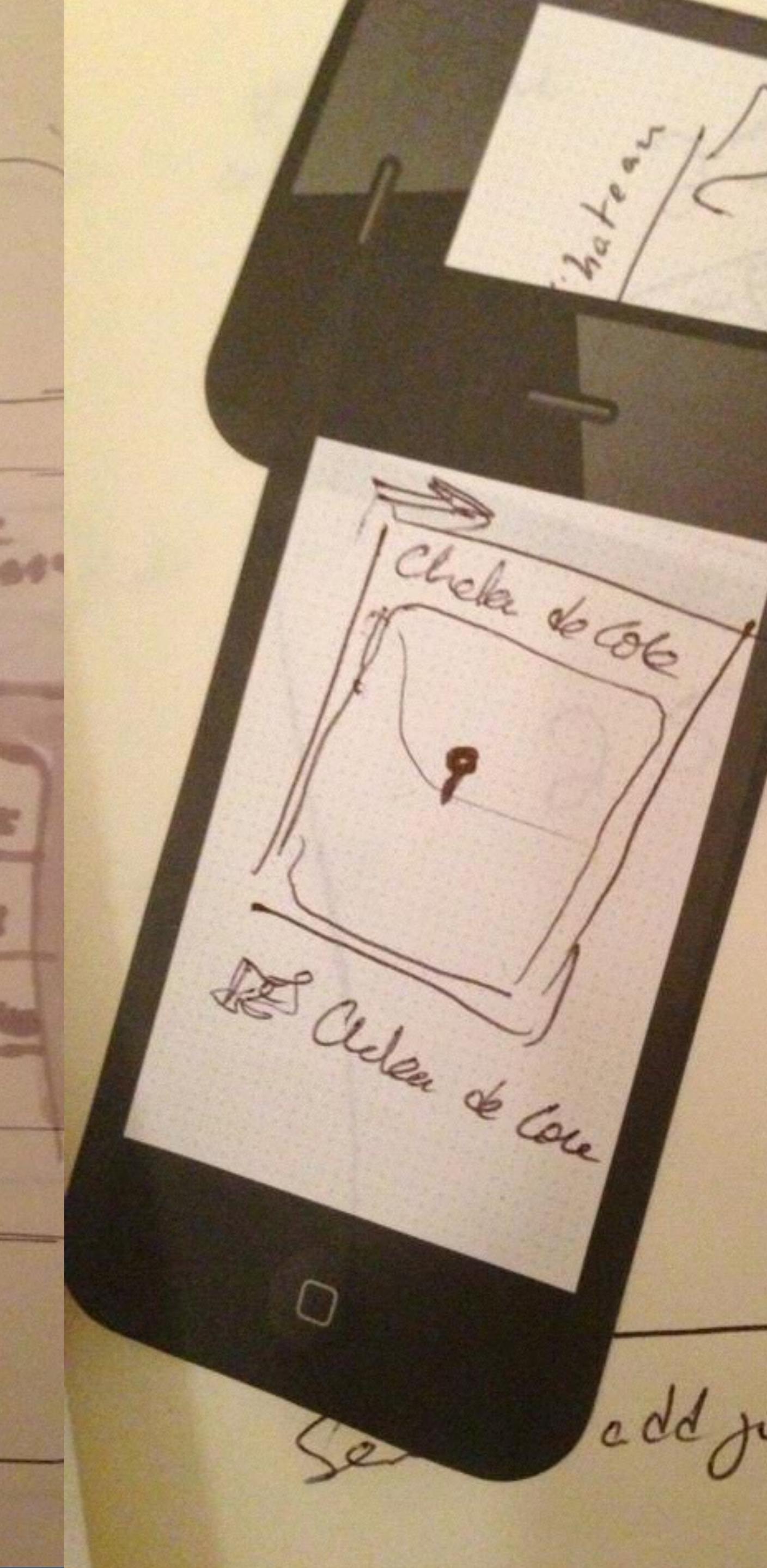
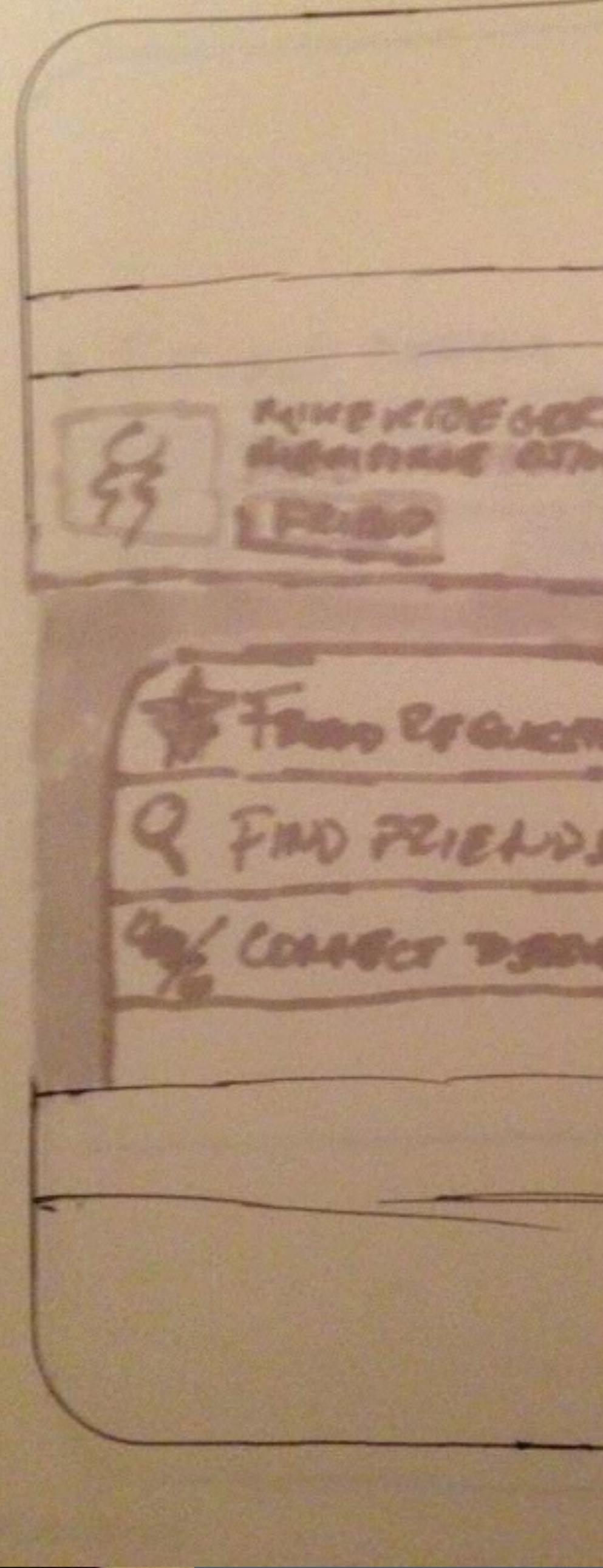
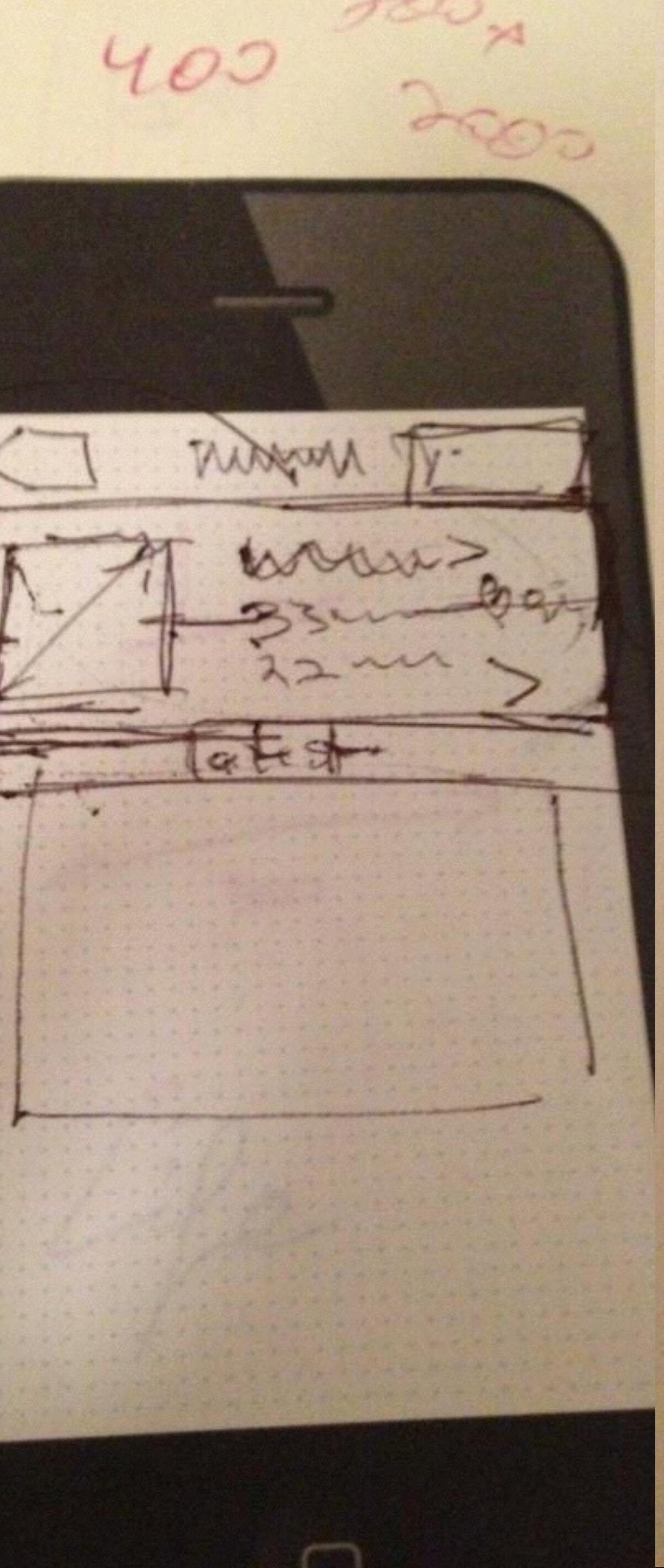
- John Tang
  - Researcher at Microsoft Research, PhD from ME Design group
- Henriette Cramer
  - Research scientist at Yahoo!, studies context in UI
- Jenn Marlow
  - Research scientist at FXPAL, recent PhD from Carnegie Mellon's HCI Institute

# Project 0: sign up for studio

- Due at midnight tonight, and required in order to take the class
- It's at <http://hci.st/247signup>

# Visual communication

It's not art.



# You can draw.

Hint: you were five years old once.

# Sketching is for communication

So the user or your design colleagues can understand your concepts

# Begin sketching lecture

We're going full-on Verplank.  
This part of lecture will not be in the published slides.



# Fifteen designs

Let's try it again, this time with your new skills.

Send your sketches  
to The Wall

You know nothing, Jon Snow.

# Project I

# That's pretty sketchy

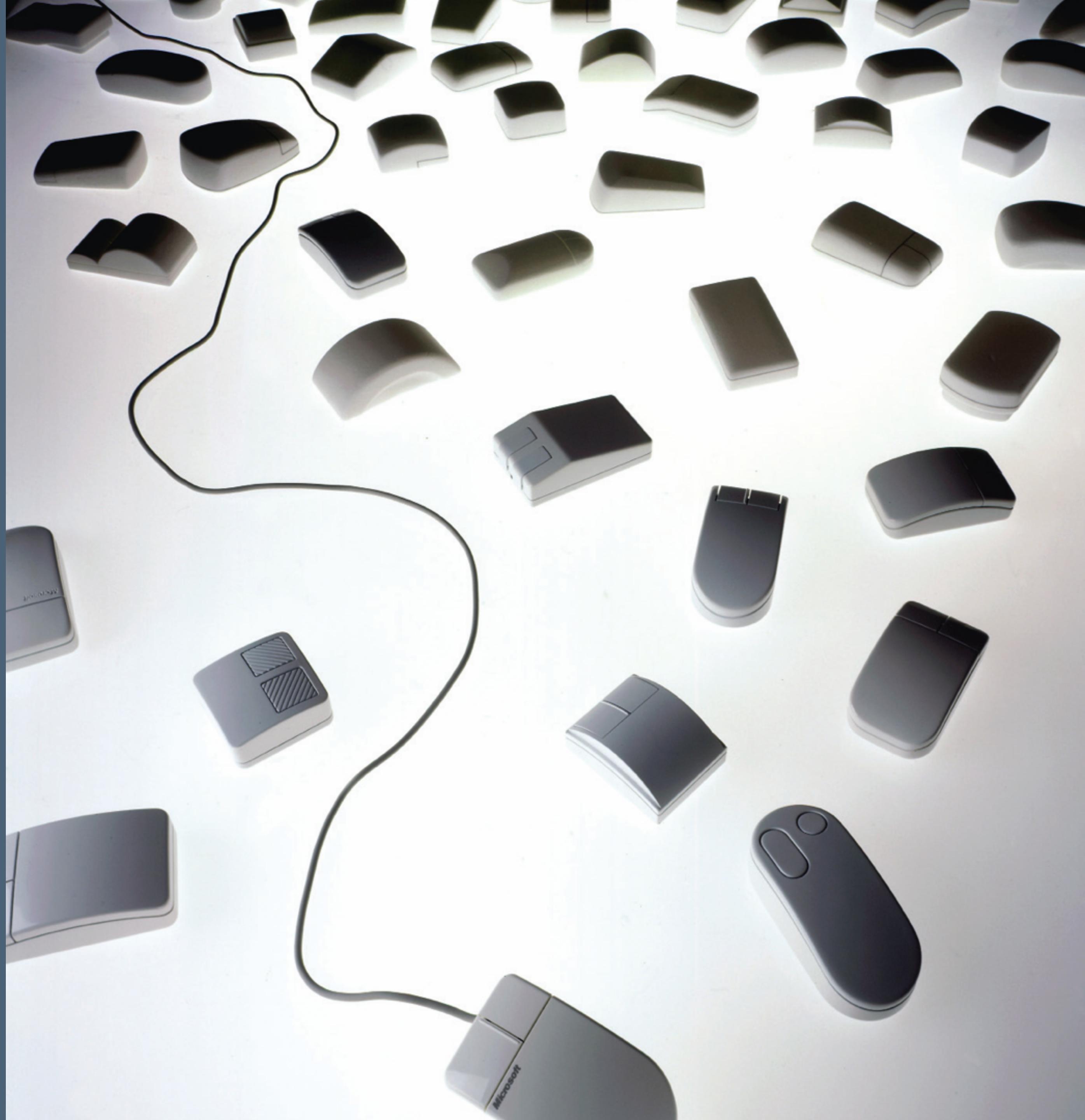
- Goal: visual communication skills
- Brief: sketch static interfaces, sketch an environment
- Due Friday
  - Collect it all in your sketchbook, scan and submit
  - Bring zoomed-in printouts to class on Friday
- Much more at [cs247.stanford.edu](http://cs247.stanford.edu)

# Class goals and logistics

Because it wouldn't be the first day of class without them.

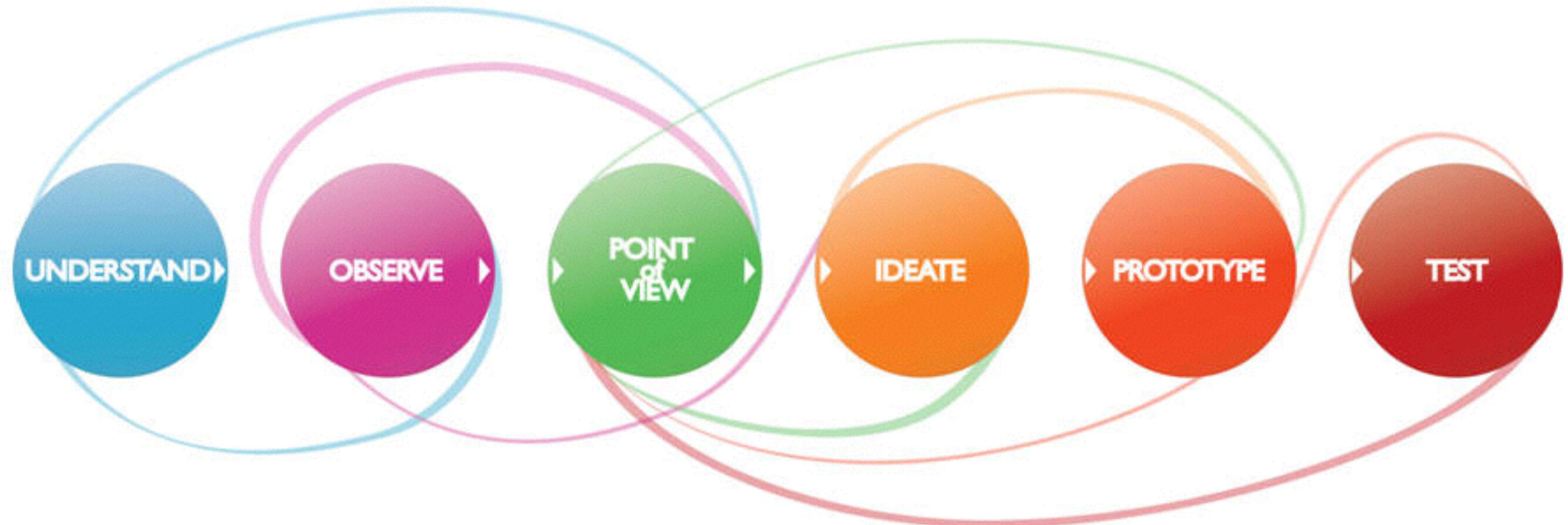
# Why CS 247?

- What was challenging about fifteen designs?
  - What if it weren't fifteen ideas? What about thirty? One hundred?
  - Communicating your idea clearly and graphically
- CS 147 black-boxed important parts of the design process



# What is this course about?

- Studio learning and critique
- Visual communication using both bits and atoms
- Rapid ideation and prototyping
- Advanced domains for HCI: ubiquitous computing, social computing, digital art, visualization and more



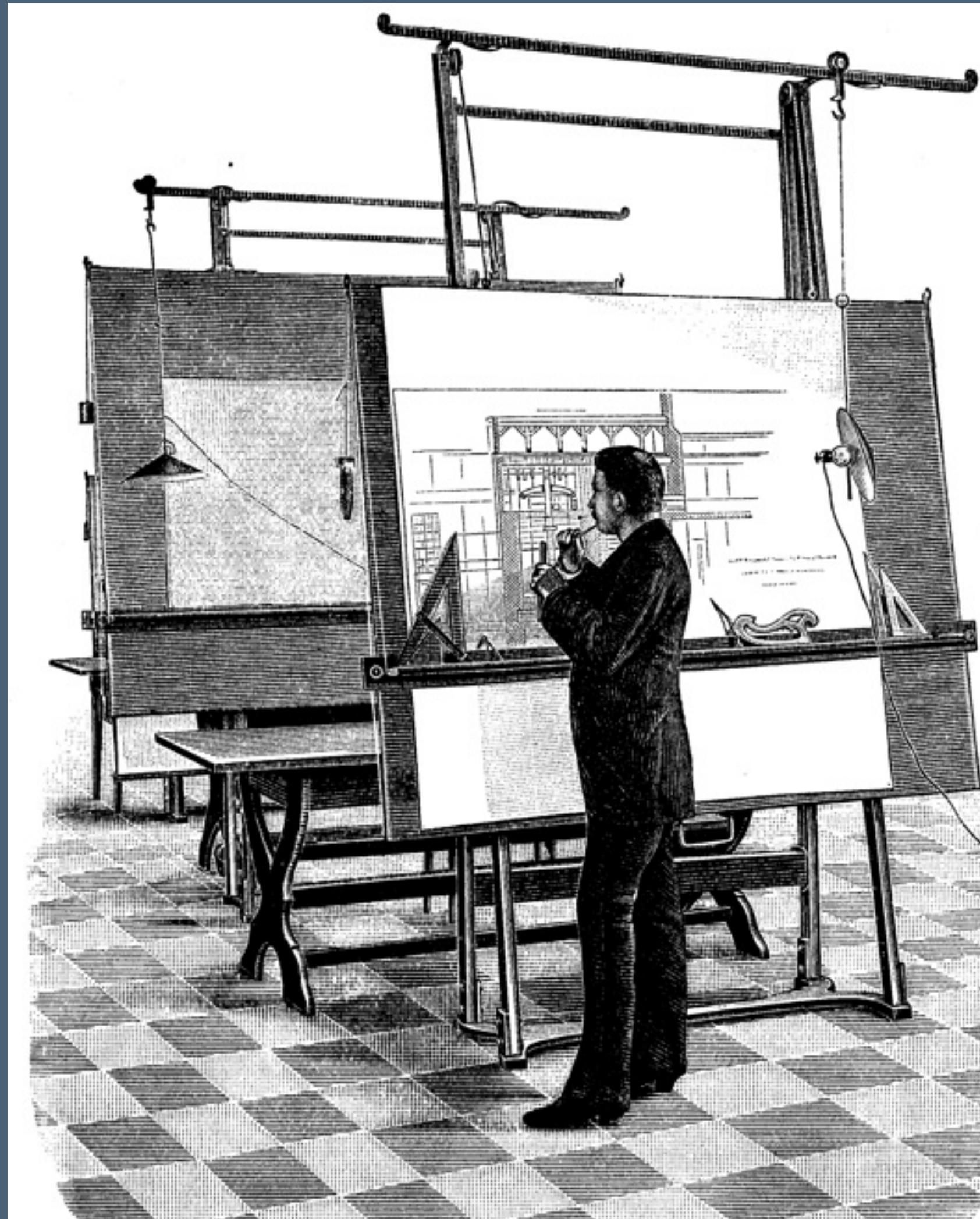
CS 147 overview

CS 247 focus

# Design studio



- Popularized by the École des Beaux-Arts in France in the 1800's
- Learning-by-doing with expert critique



# Studios

- Class is split into studios of 15-20 people each
- Each studio is led by a studio instructor and TA
- Studio instructors will lead your critique, feedback and grading

# Our project rhythm

- Assignments will be due by the start of class (3:30pm)
- Some assignments graded formatively...
  - Points for completing the requirements of the assignment
  - Typically worth fewer points
  - ✓-, ✓, ✓+ feedback to guide your progress
  - Can be redone and resubmitted at the next studio for additional feedback.

# Our project rhythm

- Assignments will be due by the start of class (1:30pm)
- Other assignments graded summatively...
  - Traditional rubric-based, graded feedback
  - Worth many more points
- Goal: use the formative assignments to get our advice and feedback in a safe space, so that you can maximize your performance on the summative assignments.

# Our project rhythm

- Example:
  - Project II, Part I: **formative**, generating mocks.  
Feedback in class.
  - Project II, Part II: **summative**, go improve and redo  
mocks if necessary, then implement.

# Four projects

- P1: visual communication
- P2: visual and interaction design
- P3: needfinding and rapid prototyping
- P4: final project

# Grading

- Heavily project-based (90%):
  - Project 1: 5%
  - Project 2: 20%
  - Project 3: 25%
  - Project 3: 40%
- Participation (10%):
  - 5% for studio participation
  - 5% for team participation

# Attendance

- This class is a studio, where a lot of the learning happens in class through a mixture of lecture, activity, and project work.
- For this to work, attendance is mandatory.
- There are two pre-excused absences allowed — post on Piazza in advance.

# Prerequisites

- We expect that you have background in **design thinking fundamentals** (e.g., CS 147) and **web programming ability** (e.g., CS 142).
- If you are from a department other than CS, SymSys, and MS&E, let's talk. We want a diverse classroom.

# Materials

- Buy a sketchbook and thick pen.
- Make sure you can easily tear out pages.
- This is required as part of PI. Get it today, use it tomorrow. Bring it to every class.
- Stanford Bookstore,  
Amazon Student Prime,  
art store on California Ave



# Questions?

Ans: 42