From Needfinding to Prototyping

Scott Klemmer
Quiz 1 Announcements

- Don’t open your quiz until class starts
- Remember to turn off all devices that beep
Quiz 1 (10 mins)
Fold top paper into 3 and write name on it like this:

Scott Klemmer
AI Announcements

- Sketch vs. prototype, wire framing
- Submitting assignments online
Campus scavenger hunt. Part of freshman orientation. Free food provided based on how many locations visited. UCSD apparel provided in 1st and 2nd place teams (must travel together to be a team). Also held once a week after school begins.

What can be done in order to ensure our persona is effective?

How do you find the middle ground between a leading question and one which is too generic?

Freshmen are discovering a new place on campus, guided by the orientation leader. They eat and bond as they discuss new places they have discovered.

Let's repeat later to reinforce.
Today’s Plan

· Introduce Interviewing and Needfinding
· Activity: Your turn!
· Discuss A2
INTERVIEWS
Follow up

• Adjust your questions to their previous answers
• Ask questions in language they use / understand
• Pick up on and ask for examples
• Be flexible
Scheduled Interviews Facilitate Depth
Plans are useless
Planning is invaluable
Create a “Field Guide” (Steve Portigal’s insights)

- Introduction and participant background
- Main body
- Projection/dream questions
- Wrap Up
Do a Trial Run first

*(gives you practice, catches bugs)*
where to interview?
should you record audio or video?
Audio/Video: Drawbacks

- Time-consuming to review / edit
- Can change participants’ responses
- Requires permission
Audio/video: Benefits

- A robust record
- Highlights are GREAT for communication
- Helps you focus on interviewing
Photos Are Powerful Reminders
What are the gems?

- You’ve uncovered a surprise or found what is missing
- You can explain why people do unusual things
- You want to tell others about what you have learned
Share with your team

- Stories
- Photos
- Sketches
- Quotes
Save Records - It’ll help later

- Keep photos, notes, and artifacts
- Helps tie all design to use, rather than debating things on an abstract plane
DISTILLING YOUR INSIGHTS
Your goal:
a point of view
Flare, then focus.
Observation alone does not guarantee a great design.
Image courtesy of SAP
Were the users just “dumb”? 
Try & do

Ask & listen

Watch & Observe

Picture courtesy of SAP
Need finding through Facebook

- Scenario: How might we help people get to and around campus without driving solo?

- In Facebook, use key terms to search for groups to fit your community (2 mins)

- Turn to your partner to discuss the groups you found (4 mins)
Collecting Needfinding Data on Facebook

· From the previous scenario, think of some Facebook status updates you might post to gather information about user needs

· Share your status ideas with your partner. What questions did you ask? How did they differ? (4 mins)

· BONUS: if you’re curious, choose a time you think will get the best responses to post the status and see what you get
The outcome of activity analysis

• What are the steps?
• What are the artifacts?
• What are the goals? (how you’ll measure success)
• What are the pain points?
Example: steps

• Unlock driver's door
• Take a seat behind the wheel
• Insert key in ignition switch
• Turn key fully clockwise
• When engine starts, release the key

Example: artifacts

- key
- car
  - door-lock
  - ignition switch
Example: goals

• (your point of view comes in here)
• Turn on the car?
• Pick up bread?
• Make a meal?
• Have a satisfying evening?
Example: pain points

• In the narrow version: necessary to put the key in? It’s already in the car. Why not just drive off?
• In the slightly broader framing, the pain point could be needing a car to get bread. (Alternatively, bread could be delivered, or you could walk/bike/...
Activity Analysis is easiest for...

- Workflows like doing taxes or travel planning
- Repeated activities, like scheduling (why does it take 17 emails?)
Challenge: we don’t design tasks

• Activities and objects don’t map 1:1 (a smartphone is not just one “activity”)
• We design artifacts. So a forum has multiple tasks.
Have multiple related activities

• The same person uses the same design to achieve slightly different things
• Also, different people may do things slightly differently
• Because they have slightly different goals, expertise, ...
• For empathy, keep ‘em human
Needfinding Activity
Prototyping grounds communication

Image courtesy of SAP
• Innovation
• Collaboration
• Creativity
- Enables designers to test their hypothesis

Image courtesy of SAP
It’s not about the artifact, it’s about feedback and iteration.
• Colleagues
• Clients
• Users
• Yourselves
Image of Kodak DC220- Kodak DC Series from wikipedia.org
Focus on goals in evolving your design
In 2000, Palm sold nearly 8 million units and had a 76% share of the PDA market. *
The journey to 8 million users begins with a block of wood
“If I wanted to check the calendar I’d take it out and press the wooden button.”

-Jeff Hawkins
Prototypes answer questions, like…

How might it look?

Image courtesy of Mike Krieger
Prototypes answer questions, like...

How might it work?

Image courtesy of SAP
Prototypes answer questions, like…

What might the experience be?

Image courtesy of SAP
Walter Dorwin Teague reviewing a prototype.
Picture from www.Teague.com
“The best way to have a good idea is to have lots of ideas.”

- Linus Pauling

Image from http://www.notablebiographies.com/Ni-Pe/Pauling-Linus.htm
Mouse prototype ideas IDEO produced for Microsoft
Prototypes are questions
Ask lots of them