• 115-130: Discussion of last week
• 130-230: Personas & Prototyping
• 230-245: Break
• 245-330: Group consulting
• 330-345: Group introductions
• 345-4: Wrap-up, Questions and Feedback
Personas and Prototyping

Tapan S. Parikh • parikh@ischool.berkeley.edu
Who is the “User”?  

“User” is an abstract concept that could be used to support any design idea

The user would like a timer to see how much time is left in class

Having the ability to observe the notes that other students are taking would help users’ understanding

The user wants a function that allows her to vaporize another student in the class

Are these all the same “user”? 
Personas

Personas are “hypothetical archetypes” of real users

Clevis McCloud, crotchety septuagenarian

Marie Dubois, Bi-lingual business traveler

Chuck Burgermeister, Business Traveler

Ethan Scott, 9-year old boy

Source: Alan Cooper, The Inmates are Running the Asylum, Chapter 9
Personas

Personas ground design conversations

Clevis McCloud, crotchety septuagenarian

Marie Dubois, Bi-lingual business traveler

Chuck Burgermeister, Business Traveler

Ethan Scott, 9-year old boy

Source: Alan Cooper, The Inmates are Running the Asylum, Chapter 9
Cooper’s Advice

Precision matters more than accuracy
Personas smoothen out individual quirks
Aim for the center
Stereotypes are OK!
It’s a user persona, not a buyer persona

*Personas are the single most powerful design tool that we use*

Source: Alan Cooper, *The Inmates are Running the Asylum*, Chapter 9

Thursday, September 29, 2011
Pruitt and Grudin’s Advice

Personas can be based on market research, contextual inquiry and design ethnography.

Personas “act” in scenarios, and scenarios contain personas.

Try not to re-use the same personas excessively.

*Personas are not a panacea*

Source: Pruitt and Grudin, "Personas: Practice and theory", Communications of the ACM

Thursday, September 29, 2011
Personas Activity
Design

Prototype

Evaluate
Design Iteration

The goal is to test as many ideas as possible
Formative as opposed to summative evaluation - especially with early stage prototypes
Two Key Questions

What do I want to Learn?
What do I want to Communicate?
Low-Fidelity Prototypes

Provide an early, concrete representation of a design idea
Provide hands-on experience for all stakeholders (design teams, users, customers, etc.)
Everyone understands their limitations
Can be made cheaply, and can be fun to make and use
Lo-Fi Techniques

Scenarios
Storyboards
Design Sketch
Paper Flipbook
Cardboard / Foam Mock-up
Scenarios

“Scenarios are stories about people and their activities”

Focuses developers on the most important user activities that should be supported.

Does not focus on implementation.

Can either describe current practice, or a future hypothetical scenario.
Ways to Present a Scenario

Text paragraph

Storyboard (Comic book)

Video
Example Scenario

John wants to take notes while in class. Even though the slides will be posted online later, he wants to make sure he captures the most important points. Before the professor starts the lecture, he starts the note-taking application on his phone. The application automatically notes the current date, time and class. During the class he can press one of two buttons - to start recording audio or to take a picture. After recording, the application allows him to tag the recording with keywords. Later, when he is home, he can review his notes, synchronized with the powerpoint slides downloaded from the course website. He can search by keyword, follow the lecture linearly, or sped up in time.
Elements of a Scenario

Agents / Actors

Setting

Goals / Objectives

Actions / Events
Example Scenario

John wants to take notes while in class. Even though the slides will be posted online later, he wants to make sure he captures the most important points. Before the professor starts the lecture, he starts the note-taking application on his phone. The application automatically notes the current date, time and class. During the class he can press one of two buttons - to start recording audio or to take a picture. After recording, the application allows him to tag the recording with keywords. Later, when he is home, he can review his notes, synchronized with the powerpoint slides downloaded from the course website. He can search by keyword, follow the lecture linearly, or sped up in time.
Example Scenario

John wants to take notes while in class. Even though the slides will be posted online later, he wants to make sure he captures the most important points. Before the professor starts the lecture, he starts the note-taking application on his phone. The application automatically notes the current date, time and class. During the class he can press one of two buttons - to start recording audio or to take a picture. After recording, the application allows him to tag the recording with keywords. Later, when he is home, he can review his notes, synchronized with the powerpoint slides downloaded from the course web site. He can search by keyword, follow the lecture linearly, or sped up in time.
Storyboard #1: Creating + Modifying a Blog Entry

1. This user is enjoying the great outdoors when suddenly, inspiration for a blog post strikes.

2. She writes her blog post on the provided paper and saves it as a draft to modify later.

3. Once home, she docks the pen, which sends the data to the software, which she opens up.

Source: http://vis.berkeley.edu/courses/cs160-fa06/wiki/index.php/InteractivePrototype-Group:4Cornersa
Thursday, September 29, 2011
Mary Kate: Wewwup Karl?
Karl V: Nuthin’ much

You going out tonight?!
E-Finder

Your location:
Hearst + LeRoy
Berkeley 94709

Search region:
Bay Area

Change search region

Search:
Godzilla

Recommendation:

Action

Adventure

Drama

Actor:
Godzilla

Rating:

Review:

Synopsis:

Screen 1:

AMC 21
8:45 7:00 9:45

AMC 19
3:10 5:00

AMC 21
Phone #
Address

Screen 2:

Actor:
Godzilla

Rating:

Review:

Synopsis:

Screen 3:

Actor:
Godzilla

Rating:

Review:

Synopsis:

Screen 4:

Actor:
Godzilla

Rating:

Review:

Synopsis:
Contacts

No Categories

# ab cd ef gh ji k l m n o p q r st u v w x y z

Bake-Schwieler dd@NAVIGATION. E
DSI Video... (877)483-1794. W

Contacts

⚠ Contacts will be permanently deleted. Continue?

[Yes] [No]

New View Tools
Two strips of paper
Two strips of paper
Two strips of paper

Post-It® notes too
Two strips of paper

Post-It® notes too
Materials for Lo-Fi Prototyping

Large, heavy white paper
Colored paper
Thumbtacks
Cardboard or foam core
Index cards
Tape or glue
Pencils, pens, markers
Overhead transparencies
Scissors
Hi-Fidelity Prototypes

Provide increasing amounts of functionality and refinement
Usually involve some amount of programming and interactivity
Can provide functionality to be empirically tested with users
Take more time and resources to build
Users can be distracted by limitations
Tools for Hi-Fidelity Prototyping

Powerpoint
Flash
Visual Basic
Hypercard
Photoshop
HTML
Video
Phidgets
Balsamiq
Thursday, September 29, 2011
**meeteetse**

Social well-being through place attachment

Kynthia Brunette, Matthew Eisenstadt, Erik Pukinskis, William Ryan
Team Meeteetse, Indiana University School of Informatics

**Building shared identity**
Seniors use a digital camera to take pictures at events at a community center, creating a shared identity among its members. This identity is then propagated through the sharing of photo slideshows on a wall-sized display at the center.

**Fostering place attachment**
Photos are broadcast to digital picture frames in the homes of other seniors in the area. This provides seniors at home with a window into the community, building affiliation even when they cannot or choose not to participate in community events.

**Staying abreast of community events**
A touch-screen in seniors’ homes provides an interactive schedule of events. With the picture frame, this allows seniors to stay abreast of what is happening at the community while they are at home.

**Lowering barriers to involvement**
The touch-screen also allows seniors to schedule rides to events on the schedule. This feature reduces the barrier for seniors to be part of the community when they are ready.

Source: Brunette, Kynthia, et. al. "Meeteetse". Indiana University. Student Contest Entry. CHI 2005 (adapted from Scott Klemmer)
Wizard of Oz Technique

Human operator mimics advanced computational functionality
- Speech recognition, gesture recognition, vision, etc.

Allows for testing advanced functionality without full implementation
The Rights of a Prototype

I am Disposable
I am easy to Change
I do not need to be Complete
I do not need to be Updated

Adapted from Scott Klemmer
Two Key Questions

What do I want to Learn?
What do I want to Communicate?
Kinds of Prototypes

**Role** - “are built primarily to answer questions of what an artifact could do for a user”

**Look and Feel** - “explore and demonstrate options for the concrete experience”

**Implementation** - “experiments... to demonstrate to their organization the technical feasibility of the artifact”

**Integration** - “verify that the design is complete and coherent, and to find synergy”

Source: Houde and Hill, “What do Prototypes Prototype”

Thursday, September 29, 2011
Prototyping Techniques

Scenario • Storyboard • Video
Design Sketch • Screenshot
Paper • Cardboard • Foam Mockups

Wizard of Oz
Interactive Prototypes

Lo-Fi
Hi-Fi

Thursday, September 29, 2011
Example 1. Role prototype for 3D space-planning application [E1 Houde 1990].

Example 2. Look-and-feel prototype for 3D space-planning application [E2 Houde 1990].

Example 3. Implementation prototype for 3D space-planning application [E3 Chen 1990].
Cultures of Prototyping

“Small, entrepreneurial companies tend to be prototype-driven”

“Companies that manage a large installed base of users tend to be specification-driven”

“Organizations intending to be innovative need to move from specification-driven prototypes to prototype-driven specifications”

True for development also!!!

Source: Michael Schrage, “Cultures of Prototyping”

Thursday, September 29, 2011
Probes

Probes are artifacts, technologies or processes that allow you to capture long-lived, serendipitous, inspired, etc. reflections from users over time. Could be as simple as a structured or unstructured diary, blog, picture feed or postcard.
For Next Time

Reading on working w/ Field Partners
Start thinking about and researching potential partners
Continue user observation
Start preparing 3-5 personas, 3-5 scenarios, and 1-3 prototypes of varying fidelity and purpose
Due Oct 14
• Interview / Field Notes
• Personas
• Scenarios
• Lo-fidelity Prototype
• 10-minute presentation
• 1-page Executive Summary