



Designing software
that works - for everyone

User Needs Assessment & the Designer and Developer Sprint

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Agenda



- User Needs Assessment
 - Interviews
 - Observation
 - Contextual Inquiry
 - Performing User Needs Assessment at Designer & Developer sprint
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User Needs Assessment

- Helps you uncover users' goals to design a system which will assist them in achieving those goals
 - Understanding the target audience, their typical tasks, and their specific constraints
 - Looking for patterns which will be modeled as follows:
 - Who are users and how do they accomplish their goals now?
 - Personas
 - Task analysis
 - Activity Diagrams
 - What do users need?
 - Scenarios
 - Selected techniques
 - Interviews
 - Observation
 - Contextual Inquiries
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Interviews

- Strengths
 - Understanding how users understand their work
 - Analyzing goals of work
 - Ability to follow-up and clarify
 - Builds relationships
 - Weaknesses
 - Relies on user to *self-report* accurately
 - Experts often have an inability to describe what has become subconscious (unconscious competence)
 - More time intensive for facilitator
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Observation

- Strengths
 - Allows you to watch what people do rather than rely what they say (self-report)
 - More likely to discover unmet user needs
 - Truly understanding how users get their work done in context
 - Observing subtleties of work (e.g. post-it notes, cheat sheets, interruptions)
 - Overcomes experts' inability to describe what has become subconscious
- Weaknesses
 - Time commitment
 - Difficult to be “a fly on the wall”
 - Relies on observers' interpretation
 - Hard to know what to pay attention to

“Users are perfectly capable of expressing their latent needs. They just can't do it verbally. That's why we do ethnography and empathic research!”

-Rich Sheridan, Menlo Innovations

Contextual Inquiries



Interview

(Process influenced more by designers)

Contextual Inquiry

(Process influenced by both designers and end-users)

Observation

(Process influenced more by end-users)

- Combines strengths of interview and observation
 - Interview in the context of where the work happens
 - “Show and tell”
 - Master - Apprentice relationship
 - Find “pauses” to ask questions; don’t interrupt their thought processes
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Contextual Inquiry Principles

- The user should be interviewed *in the context* in which a product is used or the work is performed
- The user is *a partner* in the design process
- The designer must *interpret* the facts gathered about users' behaviors, their environment, and what they say to uncover design implications
- The interview must have a *focus*, allowing the interviewer to subtly direct it without using a set questionnaire

Contextual Inquiry at Designer & Developer Sprint



- Let's do a bit of contextual inquiry at the sprint!
 - Help us figure out how best to present Fluid resources (e.g. components, design patterns, UX Toolkit) to developers
 - A bit of a hybrid of being a team member & performing contextual inquiry at the same time
 - First priority is to have active designer members of the team
 - If there are enough designers, some can concentrate on just contextual inquiry
 - Good way to use any downtime during the sprint
 - This is also an opportunity to learn more about the developers' processes for your own understanding
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Contextual Inquiry at Designer & Developer Sprint



- The developer teams (especially with designers present) will be a somewhat artificial environment
 - We may be tending more towards observation than interview on the CI continuum
 - Don't want to interrupt work being done, but do want to learn what we can
 - Partnering
 - Note-taking
 - Get together to share findings and perhaps create some initial models (e.g. personas, scenarios)
 - Later in the week (BOF?)
 - Meet via video-conference if needed in the future
 - Use key points found by each user researcher as a starting point for discussion
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Keeping yourself on track



- It's not always easy to determine what is relevant
 - Your problem statement likely describes your project's *focus*
 - A starting perspective, lens, or viewpoint
 - Is present whether articulated or not
 - Focus structure document
 - Clusters of questions or pieces of information you are looking to explore, grouped categorically
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Focus Structure Document



- Problem Statement
 - How can we present Fluid design patterns, components, UX Toolkit and other materials in the way that will be the most help to designers and developers?
 - Primary Research Goal
 - Understand how Sakai developers do their work in order to determine what tools and resources we can provide to them in order to create more usable & accessible applications
 - Other Research Goals
 - Understand how Sakai designers do their work (for same reason)
 - Take away any lessons about designer-developer collaboration and cooperation that we can learn from the sprint
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Key Research Questions



- What tools do they use?
 - What languages are they programming in?
 - Do they use existing code, libraries or pre-built components? How do they find them?
 - How do they decide how to use the code they find?
 - What would help them make better user interface design decisions?
 - Do they use design patterns in their work? How?
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User Needs Assessment Tips

- Be a good listener
 - Remain neutral: don't react
 - Focus on goals first, tasks second
 - Don't limit yourself to a fixed set of questions
 - Encourage story telling
 - Distance yourself from the product
 - Avoid making the user a designer
 - Categorize notes = easier analysis
 - Analyze your notes within 48 hours
 - Ideally should be performed in teams
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User Needs Assessment Tips



- Don't use questions that can be answered with "yes" or "no"
- Don't ask leading questions
- Don't use jargon
- Don't draw attention to specific issues that you care about

Questions?



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