Needs Statements

Jenny Amos

Please sit in your teams!
Design Ideas

• Design ideas can come from anywhere, just think of your everyday life and those moments where you said, “if only there was a device that did _____”

• Listen to your clients’ needs and make what they want!
Let’s do some reverse design

• Watch the following product demos and reverse engineer the client needs (what’s) then propose characteristics (how’s)
  – Functional
  – Performance
  – Dimensions
  – Materials
  – Etc.
Snuggie!
Shamwow!
What needs did you come up with???

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<th>Snuggie</th>
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Converting Observations to Needs Statements

 USERS (Be very specific)  

 needs to  

 NEEDS (verb)  

 because  

 Surprising INSIGHTS

http://joeyaquino.wordpress.com/
Converting Observations to Needs Statements

http://designercowboy.blogspot.com/2009/12/appropriate-tools.html
Converting Observations to Needs Statements

 USERS  
(Be very specific)

 needs to

 NEEDS  
(verb)

 because

 Surprising INSIGHTS

http://joeyaquino.wordpress.com/
Example Project from Two Years Ago...
# Project Background

## Excessive Drooling

- Various causes
- Usually a result of impaired motor skills
- Leads to physical & social discomfort

## Treatment/Management Options

- Behavior therapy
- Pharmaceutical
- Surgical
- Active & passive devices
- No single method effective for all patients
User Profile

Johnny

- High school student
- Facial muscle hypertonicity leads to drooling
- Previous treatments unsuccessful
- Currently uses a bandana
Your turn

• Get into groups of 3-4
• Determine needs as before
• Write needs statements Format:
  **Stakeholder** (describe person using empathetic language) NEEDS A WAY TO **Need** (needs are verbs) BECAUSE **Insight** (describe what you’ve learned about the stakeholder and his need)
Needs and Design Requirements

- Functional Requirements
  - Saliva Storage Efficiency
- Performance Requirements
  - Portability
  - Safety
  - Quiet
  - Re-usable
- Interface Requirements
  - Comfort
  - Aesthetics
  - Ease of Use
Parts and Materials
User Evaluation & Feedback

“He liked that he could wipe his own mouth”

“[Hydrogel] appeared well contained”

Rated 5 out of 5 for ease of hydrogel filling and cleaning!
Needs Statement format for assignment 9/25

• Intro & Overview
  – Describe project and purpose

• Constraints
  – Realistic constraints for project: economic, environmental, sustainability, ethical, manufacturing, safety, social, etc.

• Questions
  – Things you will explore during the design process
    • Performance specifications, restrictions, related products
Once you have gathered ideas...

- Pick 3-5 ideas to explore further
- Select a few criteria for evaluating feasibility/quality of idea
- Assign an idea to each member of the team
  - Depending on team size
- Research
- Report out at next group meeting