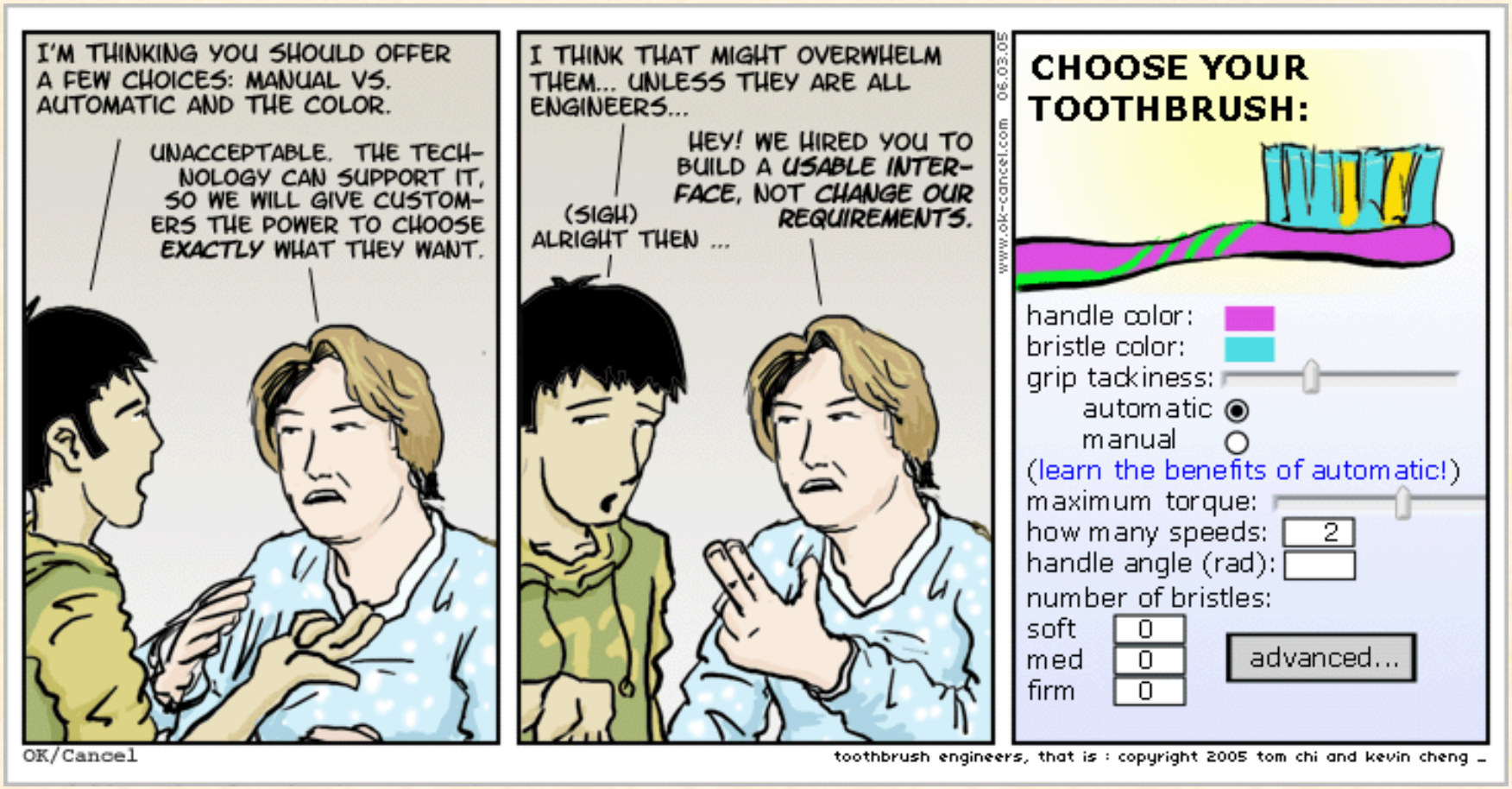
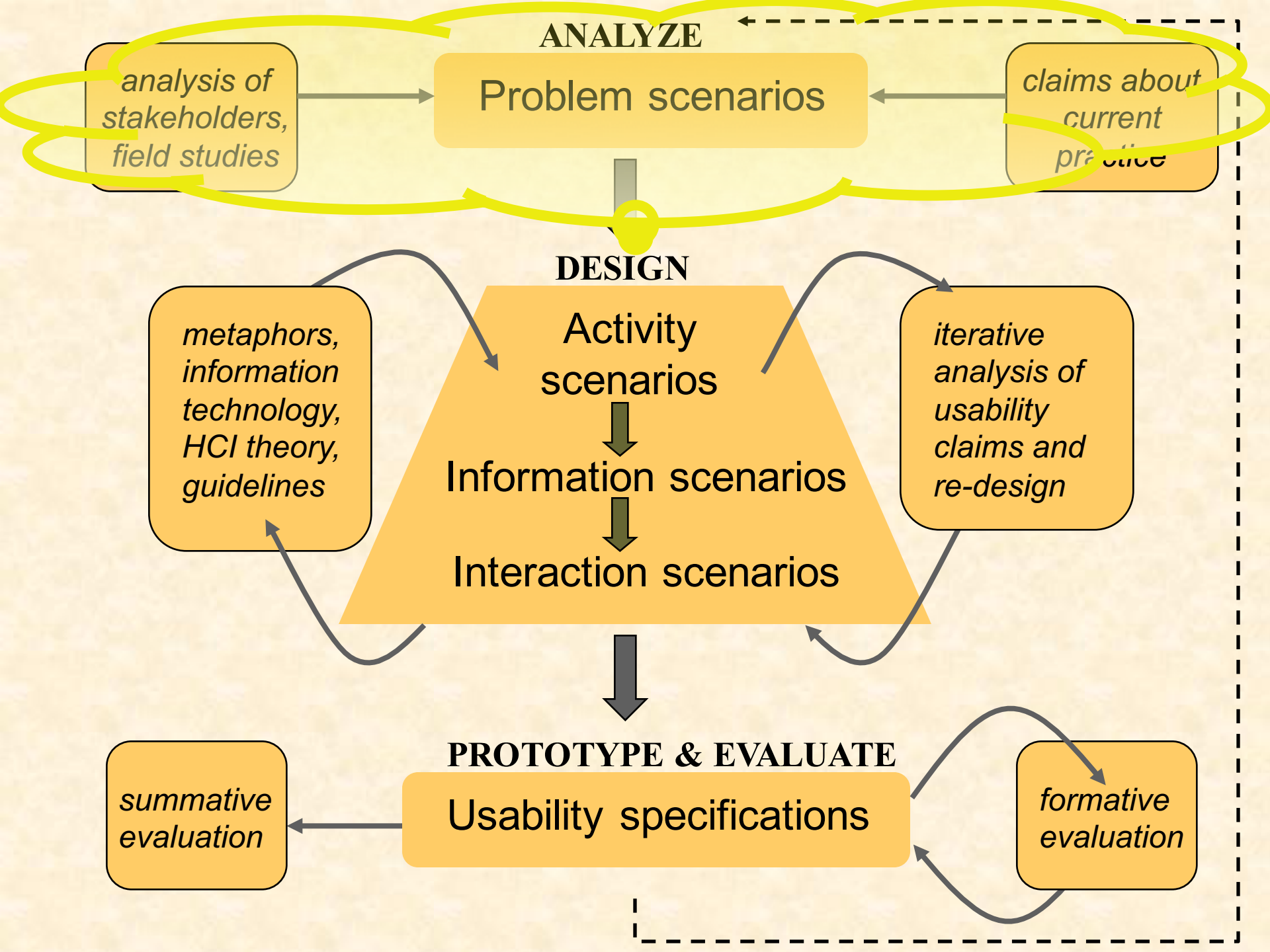
# Scenario-Based Design: Analyzing Requirements

# CS185 Human Computer Interaction (May 15th 2018)

Thanks to Chris North of Virginia Tech for the Original Slides.




http://www.ok-cancel.com/


ANALYZE
analysis of stakeholders, field studies
Problem scenarios
claims about current practice
DESIGN
metaphors, information technology, HCI theory, guidelines
Activity scenarios
Information scenarios
Interaction scenarios
iterative analysis of usability claims and re-design
PROTOTYPE & EVALUATE
summative evaluation
Usability specifications
formative evaluation

# Analyzing Requirements

- *Goal: understand users' current activities well enough to reason about technology-based enhancements*

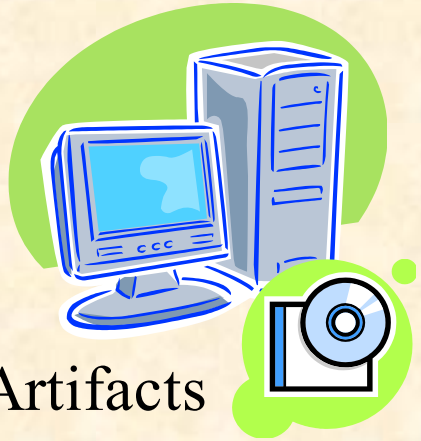
- To meet real needs, you must identify the (hidden!) problems & desires

# Things to Identify

Activities

People

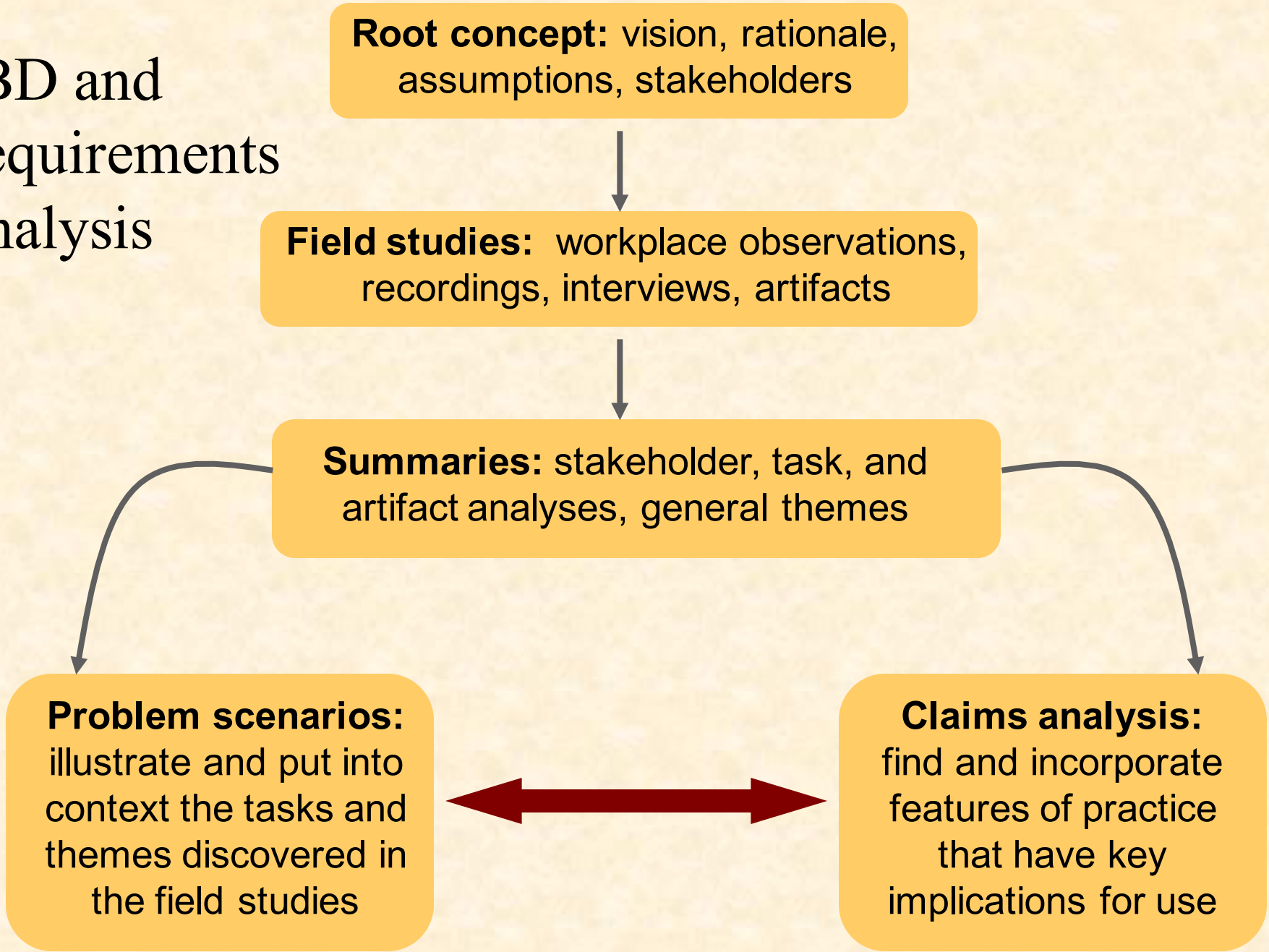
Social context



Artifacts

"users"
"stakeholders"

# SBD and Requirements Analysis



# Field Studies

- Observation
  - Ethnographic method:  watch what they do in **real** world
  - Passive vs Active:
    - Contextual inquiry (ask during)
    - Participatory analysis (ask after, with video…)
- Interviews
  - Structured or informal
  - Explicit vs Tacit knowledge
- Questionnaires
  - Survey (demographics, skills, attitudes, utility, …)
  - Quantitative, statistical results

| | Observation | Interview | Questionnaire |
|---|---|---|---|
| *Goal* | | | |
| *Method* | | | |
| *# Users* | | | |
| *Tools* | | | |
| *Data* | | | |
| *Depth* | | | |
| *Effort* | | | |
| *E.g.* | | | |

# Some suggestions on how to see

- ✓ Leave your categories at home…
  - ✓ Forgetting is seeing things anew.
- ✓ Listen
- ✓ Talk
- ✓ Reflect on what you've seen and heard
  - ✓ Does it make sense?
  - ✓ Can you tell a complete story?

# Representations of Results

- How to represent the problem?

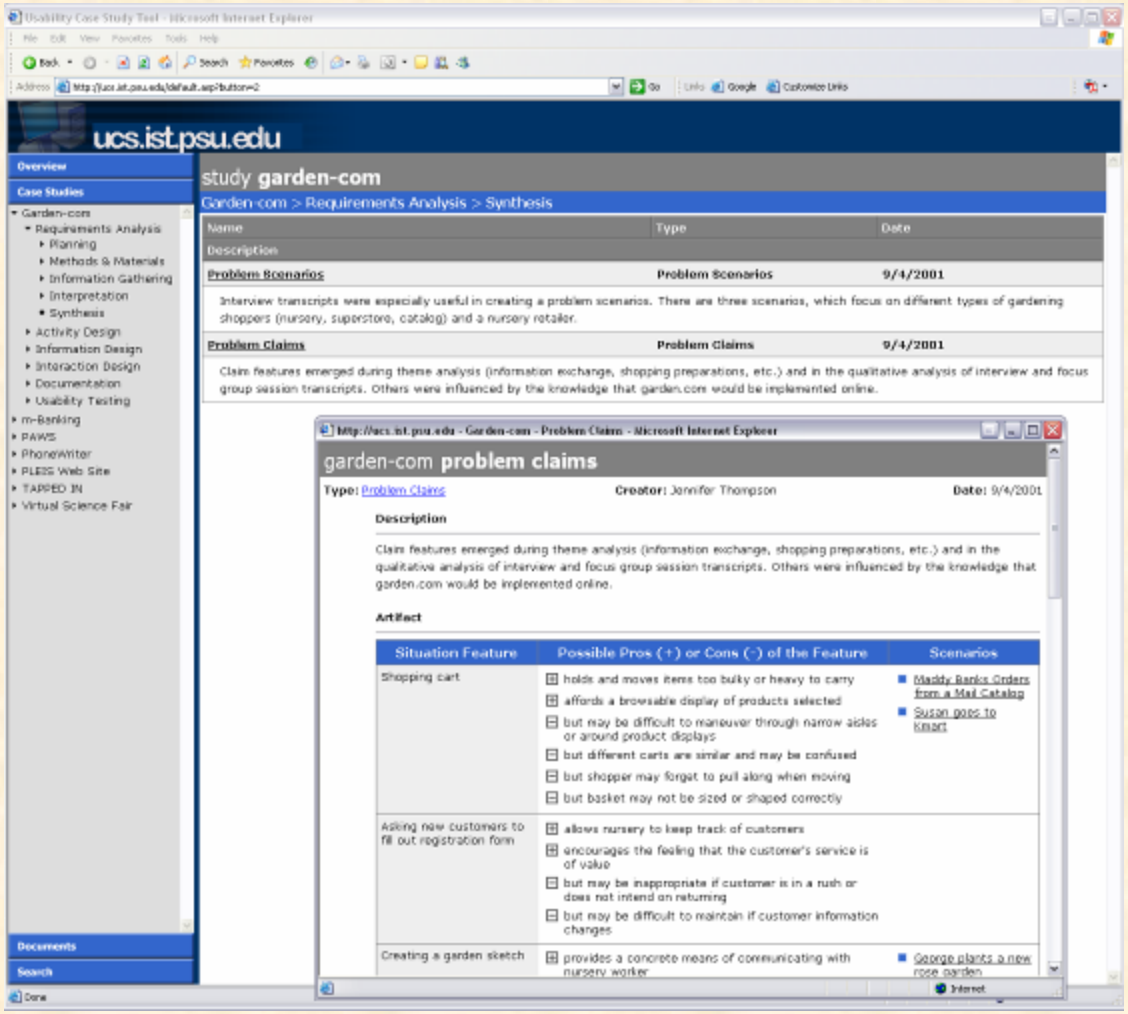
- Scenarios
- User profiles
- Video, pictures, storyboard
- HTA: hierarchical task analysis
- …

# Example: Grocery Shopping

- Users, artifacts, activities, social context
- Claims
- Problem Scenarios
- HTA

# Usability Case Library

- http://ucs.ist.psu.edu/



# Project part 2

- Sample dataset
- Goal:  Understand how analysts analyze it
- Users
- Problem scenarios, claims

- Thurs:  intell exercise

# Project

- ✓ Part 1, due Thurs: teams & topics
  - Root Concept

- ✓ Part 2, due in 2 weeks: Requirements Analysis
- ✓ Your mission: find out about your users
  - Who are they?
  - What matters to them?
  - What are they trying to **do**?
  - What is unexpected?
  - How do they now get to the information your project will present to them?
  - What is the scenario of their current work practice?
  - Can you imagine alternate scenarios?
- ✓ Start NOW!