Overview:
- Requirements analysis and SBD
  - Root concept
  - Field studies
  - Analysis
  - Problem scenarios
  - Claims analysis

Root Concept
- *Root concept* is multi-faceted statement that provides shared understanding of the project participants
  - Project vision and rationale
  - Initial analysis of stakeholders
  - Starting assumptions
- Example: on-line course registration

Field Studies
- Includes workplace observations, recordings, interviews, artifacts
- Root concept determines which activities to observe, what questions to ask
- Try to observe or interview each stakeholder group at least once

Analysis
- Summaries: stakeholder, task, and artifact analyses, general themes
  - For stakeholders: background, expectations, preferences
  - For tasks: HTA or similar
  - For artifacts: features, implied information or procedures
  - Workplace themes: category of related observations or discussion points, both good and bad

Problem Scenario
- *Problem scenario* synthesizes analysis by telling a story about current practice.
  - Called a “problem” scenario because describes activity in problem domain
  - Creative endeavor, most scenarios are entirely fictional; use *hypothetical stakeholders* as actors
  - Goal is to reveal aspects of stakeholders and activities that impact design. Provide enough background to illustrate motivation of behavior.

Claims Analysis
- *Claims feature* is anything with notable effect on a stakeholder’s experience
  - object, procedure, other person
- *Claims analysis* considers consequences of feature on stakeholders as illustrated by a problem scenario
  - Interleaved with writing problem scenario
  - Document both positive and negative impacts
  - Motivate design to increase positive impacts while decreasing negative impacts
How Many Scenarios/Claims?

- Enough to illustrate all of the important activities, artifacts, and stakeholders.
- At least one scenario for every stakeholder.
- At least one or two claims from each scenario.
- Multiple scenarios for complex tasks or stakeholder with multiple interactions.

Example

- Briefly describe some hypothetical stakeholders for the problem of providing on-line registration at UE.
- Briefly describe some problem scenarios using these stakeholders. What claims features are illustrated?

Requirement Specifications

- Problem scenarios and claims analysis describe current practices, not what new system should do.
- Therefore, they are not requirement specifications.
- But they imply requirements by describing problems and opportunities of the current situation.
- They are interleaved with design phases.

Homework 1

- Usability Case Study website at http://ucs.ist.psu.edu
- Skim all parts of Requirements Analysis portion of garden.com case study.
- Study Problem Scenarios and Claims Analysis.
- Write new problem scenario and a problem claim resulting from the scenario.
- Due at beginning of class on Friday, will discuss and compare.