

Systems Development

Needs Assessment

<http://lbgeeks.com/gitc/systemsNeeds.php>

February 28, 2007

- **Requirements And Sub Phases**
- **Needs Assessment Goals**
- **Data Gathering Methods**
- **Interviews**
- **Surveys**
- **Study Guide**
- **Exercise**
- **Remaining Schedule**

Requirements And Sub Phases

- **For this course, we split requirements into:**
 - **Needs assessment**
 - **Requirements specification**
 - **Requirements analysis**
- **Customer interaction goes from high to low**
- **Each sub phase addresses different results:**
 - **Determining what system should do**
 - **Defining features objectively**
 - **Checking for completeness, correctness**
- **Without all three results, we cannot design!**

Needs Assessment Goals

- **Divorce as related to systems development**
- **We want systems to work as expected**
- **Incorporate customer's voice into development**
- **Collecting multiple voices**
- **Every customer must have her say**
- **Concerns of people who use system must be recognized**

Data Gathering Methods

- **Ways to get needs from customers**
- **Several available:**
 - **Interviews**
 - **Observations**
 - **Panels**
 - **Performance data**
 - **Surveys**
- **Various methods are better suited for different information types**
- **We focus on two for the exercise**

- **Collect subjective customer expectations**
- **Solicit murmers, needs, wants**
- **Several modes:**
 - **One on one (1:1)**
 - **Group to one (1:M)**
 - **Group to group (M:N)**
- **Formal or informal, but structured:**
 - **Question list**
 - **Answer collection**
 - **Follow-up for record**

- **Measure objective criteria**
- **Poll groups of people**
- **Multiple choice questions**
- **Data collected via survey instrument**
- **Clarify group position on assumptions generated during interview**

Deferred Until Later Phases

- **Engineering language**
- **Purely objective statements**
- **Technical feasibility**
- **Ambiguity**
 - **Eliminate from same source**
 - **Retain across multiple sources**
- **Filtering for any reason**
- **Function or performance methods**

- **Less reading for this unit than Introduction**
- **Study questions more about concepts**
 - **Why so many data gathering techniques?**
 - **Which technique is best for what purpose?**
 - **Interviews: formal methods for success**
 - **Survey instruments: when, why, how**
- **Joint Application Design**
 - **Formal requirements process**
 - **Covers all of our phases**
 - **Learn general concept**
 - **Understand why we are not using JAD**

Group Exercise

- **Assess needs for GITC student registration database**
- **Major tasks:**
 - **Schedule work**
 - **Develop questions**
 - **Conduct interviews**
 - **Document and follow-up findings**
 - **Develop and execute survey instrument**
 - **Write final report**
- **Report must be in English**
- **Graded for technical content only**

Class Schedule Reminders

- **Next class Wednesday, March 9**
- **Office hours:**
 - **Monday, March 5**
 - **Monday, March 12 (text chat only)**
- **Office hours and class at 19:00**
- **Unit quiz on March 12 at 16:45**
- **Start Requirements Specification unit on Wednesday, March 14**
- **Final report due by start of next unit**