Requirements Elicitation

- Discovering user requirements
- Passive or Active Elicitation
  - Steve McConnell says,

    "The most difficult part of requirements gathering is not the act of recording what the users want; it is the exploratory, developmental activity of *helping users figure out what they want*."

Portions contributed by Dr. Clark Turner

Finding Requirements (a process)

- Do outside research in domains of concern
  - *what resources do we have?*
  - *how well have you researched the domains?*
- Only speak *user's terms and definitions*
  - *Have you started a data dictionary yet?*
- Ask questions (first few rounds)
  - after initial rounds, ask questions with binary answers
- Analyze, Follow up - Repeat

Portions contributed by Dr. Clark Turner

Elicitation Interviews

- Do basic research first!
  - do NOT ask questions that have been answered
  - show you followed up to previous sessions
- Focus your questions
  - Beware of broad questions
    - Sometimes they can uncover missed requirements
    - short, simple, answerable: yes/no preferred
  - if complex, ask multi-part questions
  - *use models / documents as points of reference*
  - use a parking lot for tangent ideas

Portions contributed by Dr. Clark Turner

What vs. How

- Remember: distinguish “requirements” from “design”
- Requirements are about “black box” external behavior of the proposed system
  – black box vs white box concepts
  – *software as transform of input to output*

Feedback

- Give feedback on the answers
  - offer an example, “is this what you mean?”
  - narrow the question if you must
  - do not move on until you understand or agree to look further
  - think like a customer who’ll have to live with this thing you’re going to describe
  - think like a coder who’ll have to build it!

Portions contributed by Dr. Clark Turner

Artifacts

- Have ALL critical written documents in your possession.
  - make sure your customer has copies when you discuss them
- *Build models (documents) to discuss!*

Analyze Customer’s Answers

- Give them an identification number, file them with all relevant information (dates...)
- Carefully parse answers for critical info:
  – priorities (“nice” “must” - clarify what these mean with your customer!)
  – get definitions of any new domain terms
  – generate new questions if necessary

Portions contributed by Dr. Clark Turner

Follow Up to Questions/Answers

- Careful review of all customer provided information - make connections
  - old things look different after new information
- Recognize customer’s time and effort
  - let them know how it helps you
  - always find some positive contribution, even when it looks bleak (then continue to ask...)
- Ask new questions only when done with old

Portions contributed by Dr. Clark Turner

Follow Up to Interview

- Have customer and others present “sign off” on the notes after they are complete
  - make a full report of the session
    - who, what happened, when, where
  - send the report to all concerned parties and ask them for any corrections or comments
    - archive the info

In Person Meetings

- Be aware of body language / personal issues
  - if someone on your team doesn't get along, they should be reassigned :-)
  - trust your intuition
  - be kind, gentle and understanding
  - be aggressive only when appropriate (when challenged or friendly banter)

Portions contributed by Dr. Clark Turner

Main Themes

- We’re writing Requirements
- Our job: serve the customer
  - be prepared
  - make the customer’s job as easy as possible
- Customer’s job: help us serve them
  - this is implicit in the customer / developer bill of rights in Wiegers
    - realistically this is a problem, refer to above (our job!)
- Be professional at all times

Portions contributed by Dr. Clark Turner

Project Variables

- Scope (features)
- Quality
- Schedule
- Cost
- Staff
- Discussion:
  - What are the degrees of freedom in our course project?