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

Portions contributed by Dr. Clark Turner
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?