Questions?

• Project #4
• HW #7
  – Extended by one week;
  – HW #8 cancelled;
Example
Interviews

• Method
  – Pick the right population
    • Individual or group discussion
  – Be prepared
    • Plan a set of central questions
  – Probe more deeply on interesting issues as they arise
    • Focus on goals not technology
    • Find the root of the problem

• Pros and cons
  – Very good at directing next design phase
    • Provide many constructive suggestions
  – Subjective
    • Do not ask leading questions
  – Time consuming
Questionnaires and surveys I

• Method
  – Pick the population
    • Demographics and sample size
      – Between 50 and 1000 subject
  – Establish the purpose of the questionnaire
    • What information is sought?
    • How would you analyze the results?
  – Establish the means of deliver/collection
    • On-line
    • Direct interaction with users
      – Walking in the street
      – Post-user testing
    • Surface mail
      – including a pre-addressed reply envelope gives far better response
Questionnaires and surveys II

• **Method**
  – Design the questionnaire
    • *Don’t forget to debug it!*
  – Deliver
  – Collect and analyze the data
  – Establish the main findings
Closed questions

• Supply possible answers

Characters on the computer screen are:

<table>
<thead>
<tr>
<th>hard to read</th>
<th>easy to read</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

  – Easy to analyze
  – Make it more difficult for respondents
Style of closed question: Scalar

Characters on the computer screen are:

hard to read       easy to read

1    2    3    4    5

– Be sure to pick odd numbers of choice
  • *Often between 5 and 7*
Style of closed question: Multi-choice

Which types of software have you used? (tick all that apply)

- O word processor
- O data base
- O spreadsheet
- O compiler

- Can be exclusive or inclusive

- Be sure to be specific

Do you use computers at work:

- O often                      O sometimes                      O rarely

vs

Do you use computers at work:

- O more than 4 hrs           O between 1 and 4 hrs            O less than 1 hrs
Rank the usefulness of these methods of issuing a command
(1 most useful, 2 next most useful..., 0 if not used)

__2__ command line
__1__ menu selection
__3__ control key accelerator

- Helpful to understand users preference
Open ended questions

• The user answers in his/her own words
  Can you suggest any improvements to the interfaces?

  – Good for general information
  – Difficult to analyze
    • Need for a coder
  – Can complement closed questions
Questionnaires and surveys

• Pros and cons
  – Preparation is expensive
    • Need to design and debug the questionnaire
  – Can reach a large population
    • But often a low return rate
  – As good as the questions asked
  – Data collection can be tedious
    • Use automatic forms for large volume
Qualitative approaches outcome

• High level effects
  – Task flow problems
  – Task description problems
  – Contextual findings
    • Conflict with social pattern, ...
    • Two hands needed but only one available

• Pros and Cons
  – Apply to a real situation
    • Good external validity
  – Difficult to generalize
    • Poor control of independent variables
  – Often subjective data
PSP Questionnaire

• Population?
• Distribution?
• Your main survey goal?
  – At most 10 questions