Micro-survey top topics we’ll review today:

**THIS WEEK:**
- Today:
  - Surveys

**DUE SATURDAY:** Part 2 Peer Evaluation

**NEXT WEEK:**
- Test 2
Micro-survey

Should we evaluate multiple users from our project user group?  
**YES!**

Is there one evaluation technique more popular than others or is it purely situational?  
*Probably mostly situational: how much time do you have, how many resources (including $\$, what are the goals, ...  

What’s on the exams?  
*What we’ve covered since the last one, and stuff you’ve done in part 2 and part 3, ending with surveys.*
Surveys

Learning objectives:
1. Understand when to use surveys for evaluation.
2. Understand why to use existing surveys.
3. Understand how to structure a survey.
5. Understand how to recognize problems and how to fix them.

Sources:
https://measuringu.com/survey-ux/
https://measuringu.com/survey-tips/
https://psr.iq.harvard.edu/files/psr/files/PSRQuestionnaireTipSheet_0.pdf
https://www.qualtrics.com/blog/good-survey-questions/
Evaluation

Recall evaluation paradigms:
• Quick and dirty
• Usability testing
• Field/naturalistic studies
• Analytical evaluations

Recall techniques/methods:
• Think-aloud
• Experiments
• Observations
• Heuristic evaluation
• Cognitive walkthrough

What are the “costs” (H/M/L) associated with each technique? Think in terms of type of questions they can answer, the types of data collected (i.e. qual/quant), time to prepare, time to run evaluation, need for complete vs proto system, difficulty in finding qualified users to test, how many users can be tested, etc.
Evaluation

• What do you do if there isn’t enough time to perform an observation evaluation?
• You can’t find enough qualified people to perform a usability study?
• There is no “real” system to evaluate?
• There is not enough money to fund interacting face-to-face with any users? (Until you can provide compelling arguments that this is needed!)

Should you just let R&D and Marketing build what they think will provide a good-enough User Experience?
Enter Surveys

• Clearly don’t give behavioral data like tests/observations can give.
• Can still give some quantitative data.
• If you can, use an existing survey since these have already been tests for reliability and validity. Also, you can compare results with other products that used the same survey.

Case from MeasuringU: SUS (System Usability Scale)
Survey Tips

• Create a clear hypothesis that is testable using your survey.
• Concentrate on surveying a representative sample of the population rather than lots of people.
• PRE-TEST, then REFINE, then TEST AGAIN!!!
• Keep it short. Long questions and long answers and long surveys decrease the chance of getting results.
• Do NOT require respondents to answer questions, especially ones regarding private information.
• Question order – people are impacted by previous questions:
  – Start with introduction
  – General questions first (easy to answer), BUT do NOT place questions out of order or context
  – Ask sensitive questions (e.g. demographics) near the end
  – Randomize questions to get better data across the responders
  – Only give questions applicable to each respondent (branching in surveys)
Question Goals

1. Measure the underlying concept of interest
2. Don’t measure anything else
3. Interpreted the same by all respondents
Question Types

• Open-ended:
  – biggest variety of answers; gives you more info regarding what respondents are thinking
  – take a long time to ask and analyze (since comparing answers involves coding that may be complex)
  – often skipped by users

• Closed-ended:
  – must be carefully worded so respondents interpret them the same way
Question tips

• Define terms specifically
• Provide reference frames
• Use ordinal scales (5 or 7 point best, with middle point clear)
• Answer choices must include all possibilities; make sure choices are unique; use ‘Other (please specify)’ if you’re not sure you have all the possibilities
• Avoid vague/imprecise terms; questions need to be specific and answers need to be independent – they need to be mutually exclusive
• Avoid complex sentences
• Avoid questions that measure >1 thing (double-barreled questions)
• Avoid leading, emotional, or evocative language
• Use all positive wording on scaled questions
• Use both open-ended and closed-ended questions
10 min: In groups of 2, pick one of the surveys you brought, study it, and fill in the worksheet:

Hypothesis: _____________________________________________________________

- Short overall/short questions
- Required to answer all questions
- Branching used
- Order taken into account

Order of questions (indicate order with 1, 2, 3; N/A if missing):

___Intro ___General ___Sensitive

Questions:

- Open-ended
- Closed
- Both:
- Ordinal odd-numbered
- Other: __________________________
- Missing answer choices
- Subject to interpretation
- Double-barreled

Your opinion: good or bad? 1 sentence on how you’d fix it

_________________________________________________________
In-Class Activity (20 min)

Work with your entire project team.

1. Decide an hypothesis you want to test about your system that you think can be done using a survey.
2. Decide the goals for up to 5 questions that will measure an underlying concept that helps answer your hypothesis.
3. Develop questions that meet these goals. You need to develop at least 1 open-ended question and at least 2 closed questions.
4. Write a 2-3 sentence introduction for your survey.
5. Decide if you need any sensitive (demographics) questions, and note what these would be.
6. Analyze your survey like the surveys you brought to class today.
Self Evaluation

1. What did you find the easiest thing to do when working on the project survey?
2. What was the hardest thing for you?
3. What will you do differently when working with your team to fully develop a survey to use for your project evaluation?

Micro-survey

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