Thanksgiving Survey

- What’s your name?
- Are you... female? miscellaneous?
- Are you... single? miscellaneous?
- How great are you?
- How much fun was it last year?
- How good are your plans?
- How long are your plans?
- How many people are involved?
- How much did you overpay?
what’s wrong with this survey?
surveys, studies and interviews

October 17, 2008
overall process

- analyse
- design
- implement
- evaluate

- design the study
- IRB the study
- do the study
  - users
    - who? why? how many? motivation?
  - tasks
    - which tasks? why? how many? how?
  - measures
    - what do you measure? why? how?
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IRB the study

do the study
designing the study

say you build a new instant-messaging interface.
what’s the simplest study you can conduct?

try it out

…. but, what if you know it too well to be a good judge?
designing the study

say you build a new instant-messaging interface.
what’s the simplest study you can conduct?

ask a friend to try it out

.... but, what if your friend is just really good at IMing?
designing the study

say you build a new instant-messaging interface.
what’s the simplest study you can conduct?

ask a group of friends to try it out

.... but, what if your friends like you too much to tell you it sucks?
designing the study

say you build a new instant-messaging interface. what’s the simplest study you can conduct?

ask a group of strangers to try it out

.... but, why will strangers help you out?
designing the study

say you build a new instant-messaging interface.
what’s the simplest study you can conduct?

pay a group of strangers to try it out

…. but, what kinds of strangers? what if they don’t know how to IM? you want to get your money’s worth!
designing the study

say you build a new instant-messaging interface.

what’s the simplest study you can conduct?

pay a group of users to try it out

…. but, how many users do you have to pay? you’re a student…
say you build a new instant-messaging interface.
what’s the simplest study you can conduct?

pay enough* users to try it out

…. but, how much do you have to pay them?

* we’ll get into details of how many users are enough later
designing the study

say you build a new instant-messaging interface.
what’s the simplest study you can conduct?

pay enough users enough* to try it out

…. but, what are they trying out? now that I’m paying them, I want to make sure I get my money’s worth

* we’ll get into details of how much payment is enough later
designing the study

say you build a new gee-whiz instant-messaging interface.

what’s the simplest study you can conduct?

   pay enough users enough to try out the key tasks in your interface

.... but, if I have multiple tasks, how do I know if my users are doing well or not?
designing the study

say you build a new instant-messaging interface.

what’s the simplest study you can conduct?

pay enough users enough to try out the key tasks in your interface and measure them*

…. but <insert_excuses_here>

* you can use passive things, like timers, cameras, etc, or interactive things like surveys, interviews, etc (more later)
designing the study

you know you’re done when you can’t think of any more ‘buts’ – the only valid reasons to stop are

• you can honestly not think of any more weaknesses
• you’ve arrived at one that is impossible to solve

over time, you become quite good at thinking of weaknesses, and even better at thinking of solutions
designing the study

pay *enough* users *enough* to try out the key tasks in your interface and *measure them*

**how much is enough to pay your users?**

overpaying can affect your results – users may become too eager to please.

for quick studies, we usually use cookies – how much you pay should depend on how much of their time/effort you take.

usually a token of appreciation, and something to entice them to sign up for your study.
designing the study

pay *enough* users enough to try out the key tasks in your interface and *measure them*

**how many users should you have and which ones?**

you need to ensure you come as close to approximating your target user-base as is realistically possible.

you usually want to have a few users of each ‘type’ that you expect to target.

for most of the studies in this class, somewhere in the range of 15-20 users should be appropriate.
designing the study

pay enough users enough to try out the key tasks in your interface and *measure them*

**how do you measure?**

*quantitatively* – surveys, questionnaires, timers, cameras, and so forth.

*qualitatively* – interviews, free-form feedback, focus groups, and so forth.

compare users to each other (control group vs experimental group, between/within design) or to established metrics, or to their own prior experience.
designing the study

typically, we also do a *pre-study questionnaire* and a *post-study interview*, along with all our other measurements.

**pre-study questionnaire**
- demographic information
- useful for analysing data and identifying trends

**post-study interview**
- key issue feedback
- feedback that doesn’t fit anywhere else
- great for identifying things out of left field, and for coming up with future work
surveys

can be online, paper, phone.

can be anonymous – if you don’t need names, don’t ask for them.

use any widget that makes sense and that your users can understand – checkboxes, radio-buttons and Likert-scales are common.

odd-numbered Likert scales (5, 7, 9) are common, because it gives users a neutral option. you may want to use even-numbered scales for precisely the same reason.

design your survey using standard HCI principles – avoid clutter, clear directions, be consistent in units and naming, use proximity, et cetera. it is also an interface!
Interviews can be online or face-to-face.

Good for qualitative and free-form feedback.

Most effective when done immediately after the task.

Helps to have a pre-determined protocol of things to discuss.

Almost always a good idea to compare interview results with actual measured data – plenty of research shows significant gaps between what users think they do and what they actually do.
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IRB the study
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approval required for any research involving human subjects – they review the safety and ethics of your study NOT the research quality

typically add consent forms, policies to protect the privacy and the rights of the users, and require data storage policies compliant with federal auditing.
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IRB the study

do the study
doing the study

make sure your users:
- are aware that you’re testing the interface, not them
- are comfortable in their environments
- have had the opportunity to ask questions before the study

do a dry run before you bring in any users

make sure all equipment and lab space is reserved ahead of time

be careful to not try to subconsciously influence your user’s choices