User Testing

- The goal of a user test is to figure out how the user interacts with a UI *in the wild...*

- There are two possible explanations for why a user test doesn't find significant problems:

  1. The UI doesn't have significant problems

  2. The user test has significant problems

Task Design

- User testing isn't *entirely* in the wild

- You often have to give the user a somewhat artificial task.

- The artificiality of the task may influence how users interact with a UI…

- …and thus may influence the outcomes of user testing

Artificial Constraints

First, using your account number, make 15 copies of a document. Then, make another 15 copies, but DO NOT use your account number for these.

- Tries to test a real world situation of someone reusing the copier's previous settings.

- Does so by placing artificial constraints on the user's actions.

Artificial Subgoals

…
Now you want to choose the type of paper you want to print your document on. Lets imagine that Bin "B" has the paper you want to print your paper on, please complete this task.

Now set the darkness of your copies to about 50% dark.
After setting the darkness, you decide you want to print 2 sides of copies on two sides of paper. Please complete this task.
…

- Users "in the wild" wouldn't necessarily form these subgoals

- The task should only give **one artificial top-level** goal. Every other goal should come from the user.

Artificial Ordering

- Enter in 10 copies, with lightness set to 10%.
- Choose 1 sided to 2 sided, use paper source bin A.
- Cover sheet needed, using paper bin B for cover sheet.
- Set stapling feature on and collating on.
- Start printing.

- This may be an artificial ordering of goals, because users might not proceed in this order.

- The ordering might also be biased towards the layout of the interface, which would conceal any problems with finding the appropriate control.

Changing the Task

- Make 23 copies
- With collate
- Cover sheets
- Default darkness
- 1 Sided-> 1 Sided

- The *actual* task is to make copies of some document using the copier. This happens to involve putting information into the copier's interface.

- This task description is an data entry task, telling the user, "Here is some information. Put it in the interface."

Giving the Answers

You are a teacher and are trying to make 40 copies of a one-sided magazine article that is 10 pages long for your class tomorrow. Due to the large number of copies, you print the article double-sided, in other words 10 page article would be printed on 5 sheets of paper. Due to the high contrast of the article, you must lighten the copy, in other words change the contrast. You then want the copies to be collated and stapled.

- Tells the user what terminology the user interface uses.

- What if the user doesn't know that *lighten = contrast* or *sorted = collated*?

Giving Context

It's your first day in the office, starting a new job. You would like to make some copies of several documents that your boss gave you to browse through. Your colleague in the next cubicle tells you that you need an access code to make copies. The code is 5150. You walk over to the copy machine at the end of the hall and realize that it is not the Xerox copier that you are accustomed too... Make 2 copies of the "Company Annual Report".

- Giving realistic context through scenarios can reduce the artificiality of the task.

Under-specified Tasks

You just finished fixing up the old hot rod in the garage and now its time to sell her. ==Make a couple copies== of the pictures you took to send into the used car sales magazines. It's ok that they're in black and white but ==you better lighten them up a bit.== Your account billing code is 5150.

- Most user's goals are *under-specified*. (They don't know exactly what they want to do, but have a general idea).

- By under-specifying the task, you can elicit realistic confusion.

Summary

- Task design is difficult because a poorly designed tasks don't cause visible failures

- So if you're not confident in your task descriptions, have others help you "debug" them.