

User-Centered Design

Reminder: Need Finding Assignment

- Remember to make sure that you have a need-finding session scheduled in time for to submit HW2!!!
- See prior slides and HW writeup for more details

Reading Reflection

Discuss in groups

- The reading broke usability down into subgoals:
 - effective to use (effectiveness)
 - efficient to use (efficiency)
 - safe to use (safety)
 - having good utility (utility)
 - easy to learn (learnability)
 - easy to remember how to use (memorability)
- How many of these had you thought of before?
How many were new to you (as user experience goals)?
- For the ones that were new to you, how would you define a metric that measures the subgoal for a PL task? Or a programming tools task?
- Brainstorm examples of “dark patterns” in PL.

**What do we have to work
with? Designer's "tools"**

Discoverability

It is possible to determine what actions are possible and the current state of the device

<https://tinyurl.com/294miro25>

If you skipped the Don Norman reading, you're going to want to quickly skim it (or find a summary) to start this activity!

Feedback

There is full and continuous information about the results of actions and the current state of the product or service. After an action has been executed, it is easy to determine the new state.

Conceptual model

The design projects all the information needed to create a good conceptual model of the system, leading to understanding and a feeling of control. The conceptual model enhances both discoverability and evaluation of results.

Affordances

The proper affordances exist to make the desired actions possible.

Signifiers

Effective use of signifiers ensures discoverability and that the feedback is well communicated and intelligible.

Mappings

The relationship between controls and their actions follows the principles of good mapping, enhanced as much as possible through spatial layout and temporal contiguity.

Constraints

Providing physical, logical, semantic, and cultural constraints guides actions and eases interpretation.