

Designing an Experience

02/11/2003

1. Description

This class should describe why it is important for interfaces to be based on **good conceptual models, make things visible, and respond in a way we understand.**

Conceptual models

Providing a good conceptual model allows us to predict the effects of our actions.
(e.g., Stove controls)

Affordances

Refers to the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used. (e.g., a chair affords sitting, but we can carry a chair if we choose to)

When affordances are taken advantage of, the user knows what to do just by looking: no picture, label, or instruction is required.

Constraints

- **Physical constraints**
Physical limitations constrain possible operations.
(e.g., car key, scissors)
- **Semantic constraints**
Semantic constraints rely upon the meaning of the situation to control the set of possible actions. They rely upon our knowledge of the situation and the world.
(e.g., car driver must sit facing forward)
- **Cultural constraints**
Some constraints rely on cultural constraints, even if they do not affect the physical or semantic operation.
(e.g., elevator etiquette)
- **Logical constraints**
All pieces should be used, in Lego example.

Mapping

Relationship between controls and their movements in the world.
(e.g., light switch)

Feedback

Sending back to the user information about what action has actually been done. When no response, you may conclude that nothing has been done.
(e.g., talking with a cold)

2. Activities

a. Review of homework assignment

b. LEGO Teams

What you already know is important. Colors, language, rules of etiquette, and physical limitations all affect how you approach a design problem. In fact, this same knowledge affects you as a consumer as well. This exercise should have exposed some of these details, as you were challenged to draw upon prior knowledge to construct an unknown object.

In doing so, you answered the following questions:

- How did you begin?
- Did you disagree? How did you resolve the issue?
- Did you have to start over?
- Did the exercise make you doubt your ability to construct the model?

3. Homework

Design and Redesign

Due 2/18/2003

Your task is to redesign a household interface. You can choose from the following interfaces:

- Alarm Clock
- Remote Control
- Shower Radio

Communication

You are a communicator. In every job, you will be asked to communicate your ideas. Whether it is through email, proposals, design presentations, or conversations, you must be able to present a compelling case for your ideas. Part of your assignment is to present the redesign to the class with conviction, presenting your rationale in a way that makes sense. To do so, you must have a compelling argument.

Your argument

To develop your argument, you must provide evidence that the interface needs to be redesigned. This will take some work on your part. Spend some time looking around you to choose a needy interface.

Here are some questions you should ask when examining of the interfaces around you:

- What is the environment in which you'd use the interface?
- What will you already know about its use?
- Are the buttons labeled clearly?
- What steps do you need to do to perform a task?
- Do you understand that the interface is responding to your actions?
- Do the buttons match your expectation of their function?
- Does the system provide help? Does it need to?

Present one paragraph that describes why you chose to redesign the interface. This paragraph should be accompanied by the current interface you will redesign.

Your redesign

Choose one task to redesign. For example, if you are going to choose "alarm clock" you may choose the task of "setting the alarm clock." However, make sure not to redesign in spite of the other features. So if you do choose setting an alarm clock, make sure not to sabotage the "setting the time" feature. You must provide a paragraph that describes the task you are focusing on, and what you have redesigned. More importantly, you need to provide a visual representation.

See attached sheet for a sample outline.

Design and Redesign (Sample outline)

2/18/2003

Redesign of (Insert interface here)

Argument

One paragraph that describes why you chose to redesign the interface. This paragraph should be accompanied by the current interface you will redesign.



This is the caption.

Redesign

One paragraph that describes the task you are focusing on, and what you have redesigned. More importantly, you need to provide a visual representation.



This is a callout.

This is the caption.