How To Make (Almost) Anything Usable

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Usability

The art & science of designing stuff that works great for people

- More useful & convincing final project
- For your future startup
- Fab Fame™
Today

1. Golden rules

2. Process tips
I. Simplicity
User • Task • Context
2. Visibility and Feedback
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1. Current state?
2. Available features?
3. How to access?
2. Visibility and Feedback
2. Visibility and Feedback

Read: Bret Victor’s rant on future of interaction design
3. Gestalt Laws
4. Natural Mappings
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4. Natural Mappings
5. User’s Language
6. Avoid Modes
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7. Principle of Least Surprise

Your battery is now fully charged!
7. Principle of Least Surprise

Timeouts are evil!
8. Dialog, not Monolog

Find alternative...
0:43

- Calculate alternative
- Avoid roadblock
- Travel via...
- Recalculate original
- Avoid part of route
- Minimise traffic delays

Destination: London
Back

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9. Tolerate Errors

Operation Could not be completed.
client-error-not-possible

OK
10. Visual Design
Today

1. Golden rules

2. Process tips
The DIA Cycle
Design is Iterative & Agile

Design

Analyse

Implement
Observe and Ask First, Then Start Solving

- Are you looking for a problem for your solution?
- **What** problem to solve, not **how** to solve it
- **Users:** Who is it for? Other stakeholders?
- **Task:** What is their *actual* problem?
- **Context:** When & where does it occur?
Design:

Search the Solution Space
Implement: Prototype

- Create quick prototypes to get feedback on from others, to improve and fill in your idea(s!). For each idea:
  - Write one-paragraph success story, test it
  - Then draw 3-panel success comic, test it
  - Fake features with Wizard of Oz
Bob walking somewhere

Bob never remembers faces...

If he had recognition glasses, ...

Glasses recognize Tim's name

Bob remembers Tim Brown's startup, "Brown.com"

Bob is impressed with
Evaluate: Observe & Ask
Constructive Interaction

Now, why did it do that?

Oh, I think you clicked on the wrong icon

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Analyse:
Retrospective Testing

Do you know why you never tried that option?

I didn't see it. Why don't you make it look like a button?
Iterate to Expand and Focus Solution

Iterative:
- General: overall concepts
- Iteration 1: exploratory
- Iteration 2: clarification
- Iteration 3: resolution

Granularity:
- General: overall concepts
- Coarse: significant alternatives
- Medium: intermediate development
- Fine: detailed refinement

Concept generation:
- Initial number of concepts
- New ones added
- Further addition
- Further reduction
- Concept selected
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Design Thinking

Empathize
Define
Ideeate
Prototype
Test

1. How did engaging with a real person, testing with a real person, change the direction your prototype took?

2. What would you do next? What would you do over again?

3. What principle, what tool, would you infuse into the work tomorrow?

After the video questions, try these exercises:

...
Literature

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For Persistent Storage

Paying attention to your user experience pays off

Universal Golden Rules

- Simplicity
- Avoiding Modes
- Visibility & Feedback
- Princ. of Least Surprise
- Gestalt Laws
- Dialogs
- Natural Mappings
- Error Tolerance
- User’s Language
- Visual Design

Process Tips: Iterative DIA Cycle (Design Thinking)

Design: Explore problem space first
Implement: Storyboard before Building
Analyse: Observe and ask others