MODERN HEURISTIC DESIGN EVALUATION

Making heuristic evaluation more relevant to modern software
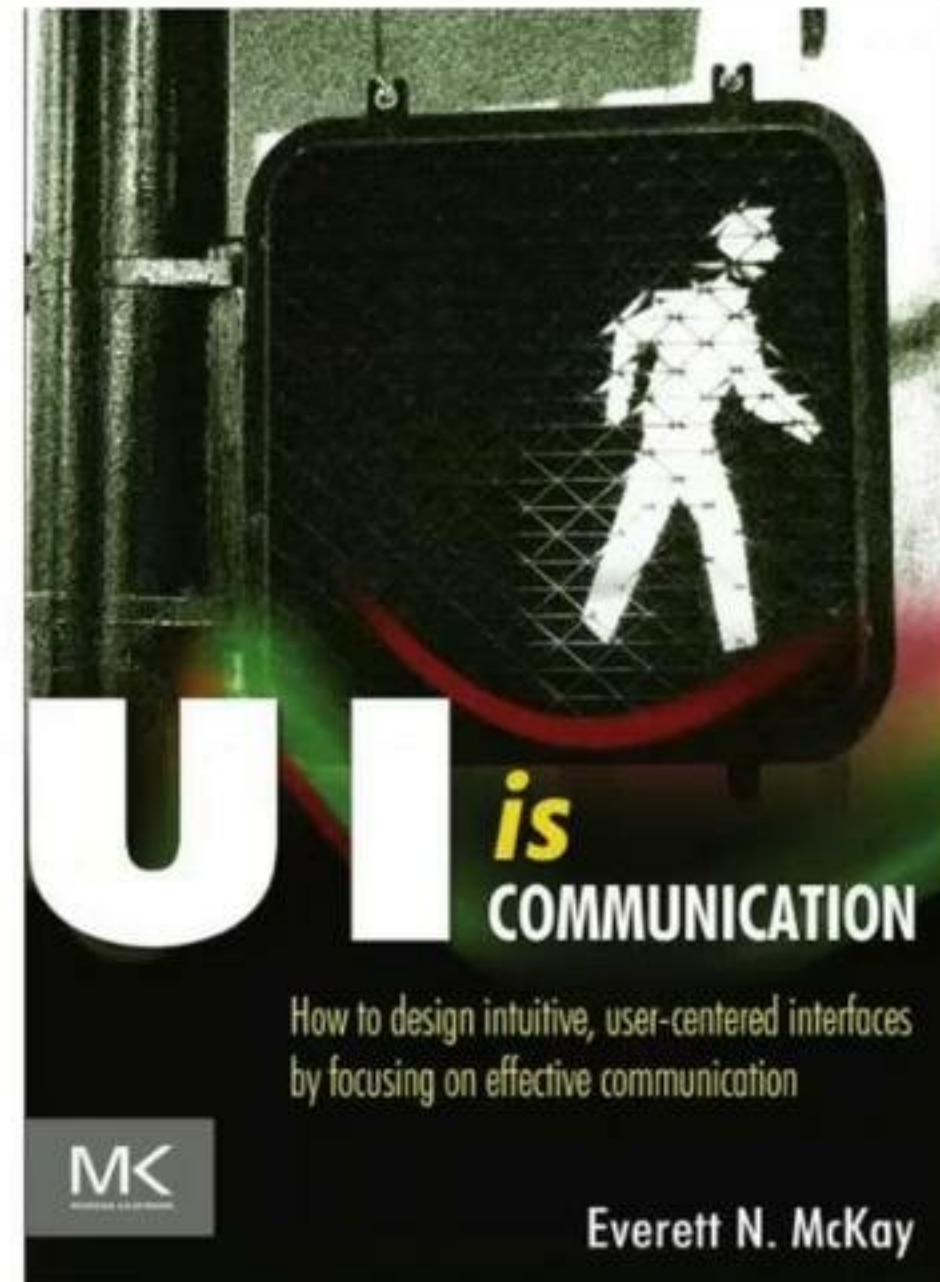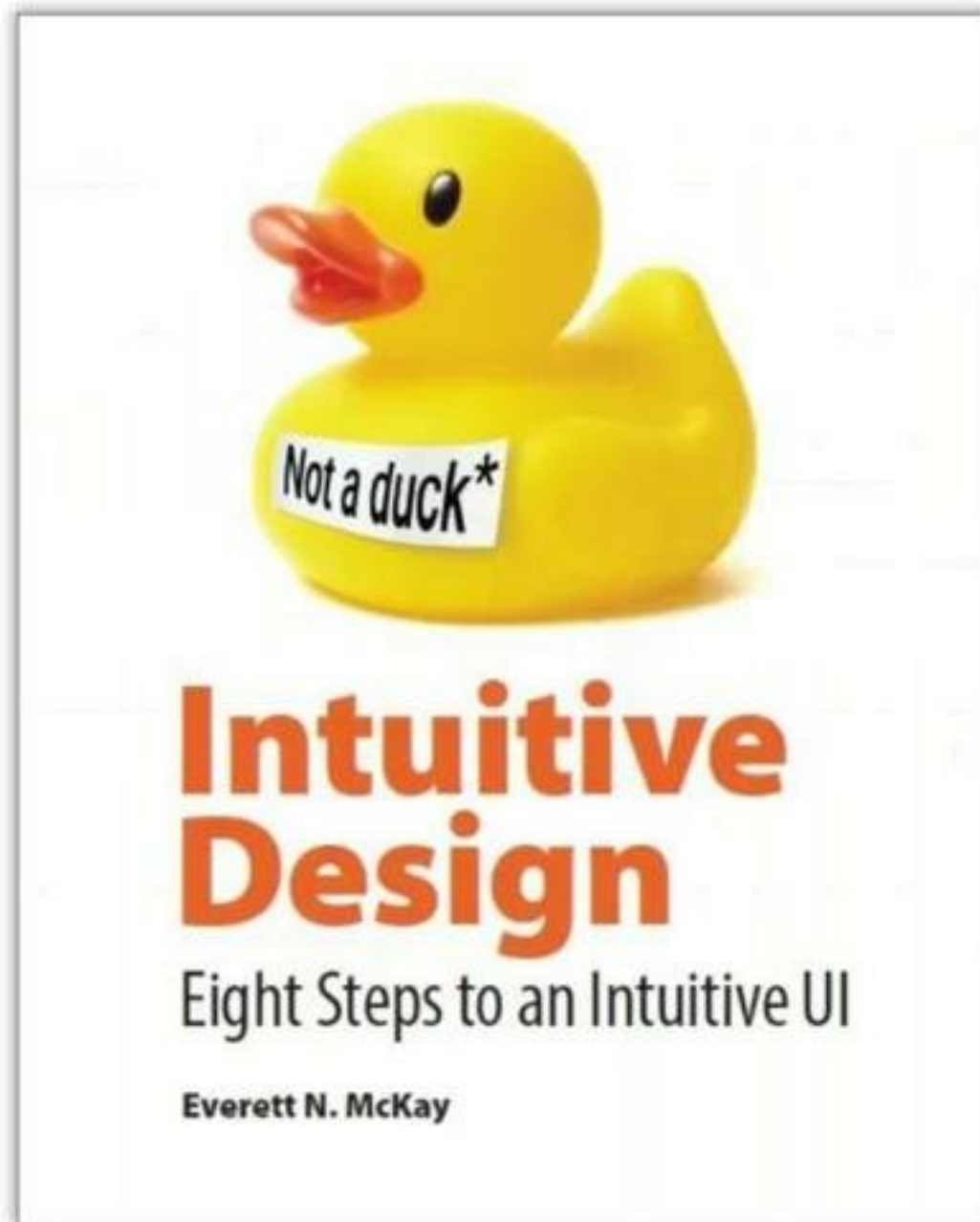
Everett McKay

UX Design Edge

everettm@uxdesignedge.com

While waiting...

You'll review a (mobile) app later. Your choices:

- Your own personal favorite bad app

- SnapChat

- A fake website (StubFlub)

My new books

Not a duck*

Intuitive Design

Eight Steps to an Intuitive UI

Everett N. McKay

UI *is* COMMUNICATION

How to design intuitive, user-centered interfaces by focusing on effective communication

Everett N. McKay

Recent reader review

★★★★★ **The best and simplest usability book ever written!**

By Revenoc Alexander on October 12, 2018

Format: Kindle Edition | **Verified Purchase**

Author uses so simple and clear language, yet so powerful and useful techniques, so it becomes obvious what is an intuitive UI and how to achieve it.

The ideas and techniques are interpreted in a different than classic usability approach, but yet they are so obvious and easy to understand.

The book takes me to a next professional level in designing interactions!

You will never ever doubt about what is a good design, because good design is an intuitive one. The one you will know how to design.

My inspiration

- As a consultant, I do many "expert reviews"—and they are fantastic!

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Perform a heuristic evaluation

Team exercise

40 minutes

Break into teams of 3 – 5 to focus on one app:

- ☐ Using *your* heuristics, apply the standard heuristic evaluation process (decide: individual/group, task/screen)

- ☐ Determine the top/essential tasks for your app

- ☐ Evaluate the tasks with your heuristics

- ☐ Make a list of usability problems (problem + heuristic pairs)

- ☐ If individual review, start presenting results to your team at 30 minutes

Short break

Please be back in 10 minutes

(Make sure your mobile app is accessible)

Share your results

Class exercise

10 minutes

Quickly present your heuristics

☐ Share your 5 best heuristics (and where they came from)

☐ How you feel about the results

Create your own mobile heuristics

Team exercise

20 minutes

Create a set of mobile heuristics (aim for 20 - 30), based on

- ☐ Previous marking

- ☐ Relevance to mobile

- ☐ Design problem coverage

- ☐ *Effective* heuristic attributes

Feel free to consolidate similar heuristics

Review the popular heuristics

Team exercise

20 minutes

- ☐ Review the popular heuristics (from last section)

- ☐ Mark the most effective—considering the *effective* heuristic attributes

Heuristics based on your own experience

Team exercise

10 minutes

Break into teams of 3 – 5:

☐ Individually: Make a list of practical heuristics based on your design work/reviews in last year

- Can be anything you want, as long as they are practical

☐ Present to team, mark favorites as you go—considering *effective* heuristic attributes

Applying to real design problems

Let's give it a try

45 minutes

How many heuristics should you have?

- How many do you need? There is a tradeoff:
- Fewer is better because:
  - More likely that everyone will understand and use
  - Focuses on what is important vs. trying to do everything
- More is better because:
  - Extremely difficult to boil practical heuristics to a small number
  - Practical heuristics are very specific
  - More likely to find problems in a wide variety of apps
- Tip: It might be easier to ID 30 heuristics than 20

Heuristics based on your own experience

Team exercise

10 minutes

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☐ Individually: Make a list of practical heuristics based on your design work/reviews in last year

- Can be anything you want, as long as they are practical

☐ Present to team, mark favorites as you go—considering *effective* heuristic attributes

Heuristics based on your own experience

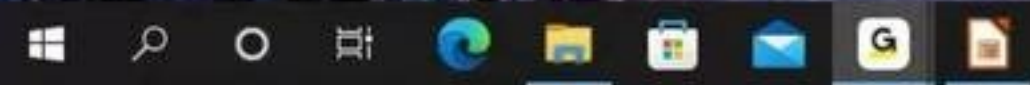**Team exercise**

10 minutes

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Usability Engineering (Nielsen, Molich)

1. **Visibility of system status**: The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

2. **Match between system and the real world**: The system should speak the user's language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

3. **User control and freedom**: Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

4. **Consistency and standards**: Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

5. **Error prevention**: Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

The heuristic evaluation process

The traditional process, recommended by Nielsen:

☐ Break into teams of 5 evaluators

☐ Work independently at first, compare results with team at end

☐ Review design in two passes: start with a high-level review, then focus on details

☐ Output: A list of usability problems (problem + heuristic pairs)

From https://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation/

My recommendations

- Make scenario-based instead of screen-based
  - Walk through screens from point of view of a specific user doing a specific task
  - May review same screen multiple times for different scenarios
- Use this default persona (if relevant)
  - First time user of app
  - Somewhat familiar with domain, but not an expert
  - Roughly knows what he/she wants, but needs help with specifics, often makes small mistakes

Choose one of the following apps

As a team, choose one of the following apps to review

☐ Your own personal favorite bad app

☐ SnapChat

☐ A fake website (StubFlub)

Taking a step back

How did we do? How can we improve?

10 minutes

Share your results

Team exercise

10 minutes

Each team will report:

☐ The top heuristic evaluation results—what problems did you find?

☐ Could you found those problems more efficiently another way?

☐ Characterize the most and least useful heuristics

☐ Process wise: What worked? What didn't?

☐ What would you change to improve?

☐ Would you recommend heuristic evaluation to your team?

Plan B: Just in case...

Team exercise

There is no failure here

☐ If your team found nothing substantial, what would need to change to make the heuristic evaluation work better?

Summary and wrap up

What did we learn?

If you remember only 6 things...

If you remember only 6 things...

1. Design reviews are important, but we don't do them well, have too much subjective, personal opinion

2. Design heuristics provide an actionable, objective vocabulary

3. Heuristic evaluations make us more efficient by leveraging existing design knowledge

4. Heuristic evaluations supplement user testing so that we can focus testing on hard-to-find problems

5. But they are only as good as the heuristics used—we need modern practical heuristics (and get beyond 25-year-old thinking)

6. We have developed our own effective heuristics and applied them to real mobile apps

Calls to action!

- Got feedback? Would love to hear it! Please contact me at everettm@uxdesignedge.com

- Join the UX Design Edge mailing list

- Let's connect on LinkedIn, follow me at @uxdesignedge

Intuitive Design Heuristics contest

Questions

Feel free to ask me questions

everettm@uxdesignedge.com

Thank you!