Design Heuristics

From Knowledge to Guidelines

- Important to understand
  - How people perceive
  - How people remember
  - How people act to pursue goals

- How can system designs use this knowledge to improve UX?
  - A: “Guidelines”

Usability Inspection

- A way to quickly find problems with user interfaces
- "Problems"
  - Prevent users from accomplishing goals
  - Annoy users even if they eventually figure it out
  - Create confusion, uncertainty, frustration, and other negative responses

- Basic idea
  - An "expert" goes through the system methodically
  - Look for adherence to well-known principles of good design

Guidelines

- There are many guidelines out there
  - Example: http://guidelines.usability.gov/
  - Example: https://developer.android.com/design/index.html

- You could use any set of guidelines for an inspection

- Choosing guidelines
  - Are they well-supported and focused on user experience?
  - Do they cover all the important best practices?
  - Do they apply to your platform/situation?
  - Are they easy to use?

Jakob Nielsen's 10 Heuristics

- "Heuristic" means "rule of thumb"
  - Slightly more general than a "guideline"
- Derived from a systematic review of usability problems
- Intended to be a small, complete, and usable set
- Able to be taught in a few hours
  - (though you get better with practice)
- Well-supported by theories of perception and cognition

And here they are...

1. Visibility of system status
2. Match between system and the real world
3. User control and freedom
4. Consistency and standards
5. Error prevention
6. Recognition rather than recall
7. Flexibility and efficiency of use
8. Aesthetic and minimalist design
9. Help users recognize, diagnose, and recover from errors
10. Help and documentation

How to Use Them

- **Self-critique when designing UIs**
- **Use in *Heuristic Evaluation*, a UX Research method**