

# Usability Heuristics and Design Guidelines, Part I

**Human Computer Interaction and Communication** 

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# **Topics and Agenda**

- Assessment 06
- High-Level Design Guidelines
- Jakob Nielsen's Ten Usability Heuristics
- Reflection



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# **Course Progress**

- Project 01: World Food Initiative Website
- Project 02: Auto Rental Corporation Website

- Class 16: Research Plan Evaluation	<ul> <li>Class 24: Updating Your Research Plan and Competitive Analysis</li> </ul>
* Class 17: Competitive Analysis Evaluation	<ul><li>Class 25: Usability Heuristics and Design Guidelines, Part I</li><li>Assessment 06</li></ul>
* Class 18: Storyboards	<ul> <li>Class 26: Usability Heuristics and Design Guidelines, Part II</li> </ul>
<ul> <li>Class 19: Storyboard Evaluation</li> <li>Assessment 04</li> </ul>	Class 27: Heuristic Evaluations
<ul> <li>Class 20: Generalized Transition Networks         (GTNs) and Sitemaps</li> </ul>	<ul><li>Class 28: High-Level Design Review</li><li>Assessment 07</li></ul>
Class 21: GTN Evaluation	Class 29: Low-Level Design Review
<ul> <li>Class 22: Wireframes and Mockups</li> <li>Assessment 05</li> </ul>	Class 30: Mid-Semester Assessment 02
<ul> <li>Class 23: Wireframe and Mockup Evaluation</li> </ul>	

Project 03: Usability Testing



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# High-Level Design Guidelines<sup>1</sup>

- Ensure early focus on users and tasks
- Perform empirical measurement
- Create iterative designs:
  - Create the interface design
  - Test the user interface
  - Analyze the test results
  - Repeat



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<sup>1.</sup> Rubin, Jeffery, Dana Chisnell, and Jared Spool. *The Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests*. Indianapolis: Wiley Publishing, Inc, 2008.

# Jakob Nielsen's Ten Usability Heuristics<sup>2</sup>

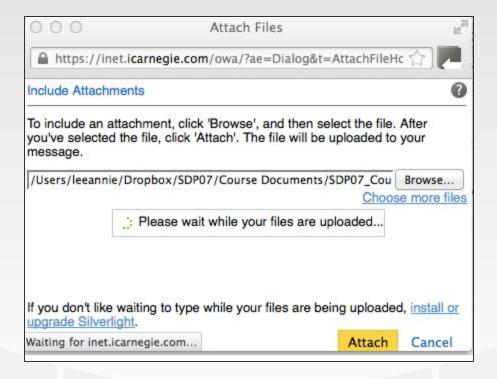
- 1. Visibility of system status
- 2. Match between system and the real world
- 3. User control and freedom
- 4. Consistency and standards
- 5. Error prevention
- 6. Recognition rather than recall
- 7. Flexibility and efficiency of use
- 8. Aesthetic and minimalist design
- 9. Help users recognize, diagnose,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

2. http://www.useit.com/papers/heuristic/heuristic\_list.html



# **Visibility of System Status**

- Keep users aware and informed about:
  - What is going on
  - What the system is doing
  - The system's status



# Match Between System and the Real World

- Users should interact with the system in their own language
- Use words, phrases, and concepts familiar to the users
- Avoid terminology that is specific to the system



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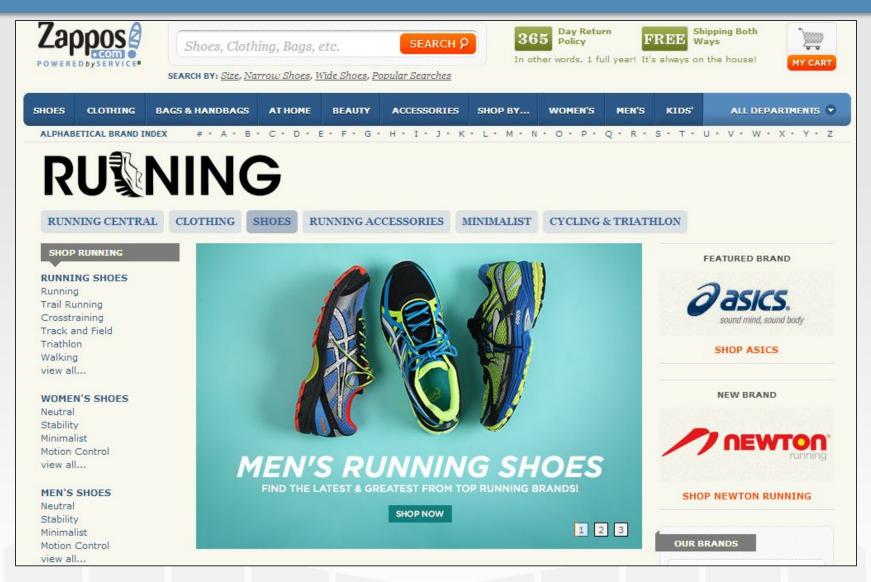
# **User Control and Freedom**

#### Users should feel:

- Free to make choices
- That they are in control of their choices
- Like they have the ability to quickly and smoothly recover or undo a wrong choice

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#### **User Control and Freedom**



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#### **Exercise Reflection**

 How might you change your designs based on Rubin's three high-level design principles?

 How might you change your designs, based on Nielsen's first three usability heuristics?

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#### Remember...

- Project 02: Due on Class 30
  - Due by 8 p.m. via the LMS
- Assessment 07: Class 28
- Mid-Semester Assessment 02: Class 30

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