HMI course
Human-Machine Interaction
Ergonomic Criteria for HMI evaluation

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Outline

- What are Ergonomic creteria and heuristics?
- Importance of ergonomic criteria and heuristics
- Famous ergonomic criteria and heuristics

Ergonomic Criteria and Heuristics

- **Ergonomic criteria and heuristics** are characteristics of the interface which will determine its usability (or ergonomics).
- They make it possible to identify ergonomic problems with an interface.
- They are used in the so-called “expert” evaluation phase, i.e. without involving the user.
- They are generally used before initiating usability testing .
- They make it now possible to define what is good or bad in the evaluation of human-machine interface.

Importance of ergonomic criteria and heuristics

- The importance of having criteria for the evaluation of human-machine interface allows several other advances:
  - It saves a lot of time, because now we know what to look for.
  - The criteria are very explicit, so there is a possibility that non-specialists can use them.

Famous ergonomic criteria and heuristics

- 8 criteria of Bastien & Scapin (INRIA)
- 10 heuristics of Nielsen
- 8 golden rules of Schneiderman
- 7 golden rules of Coutaz

Bastien & Scapin criteria

Nielsen's heuristics

Visibility of System Status

1

Match Between System & Real World

2

User Control And Freedom

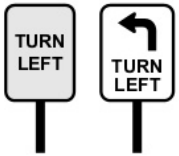
3

Consistency And Standards

4

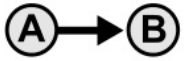
Error Prevention

5



Recognition Rather Than Recall

6



Flexibility And Efficiency of Use

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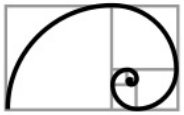


Aesthetic And Minimalististic Design

8

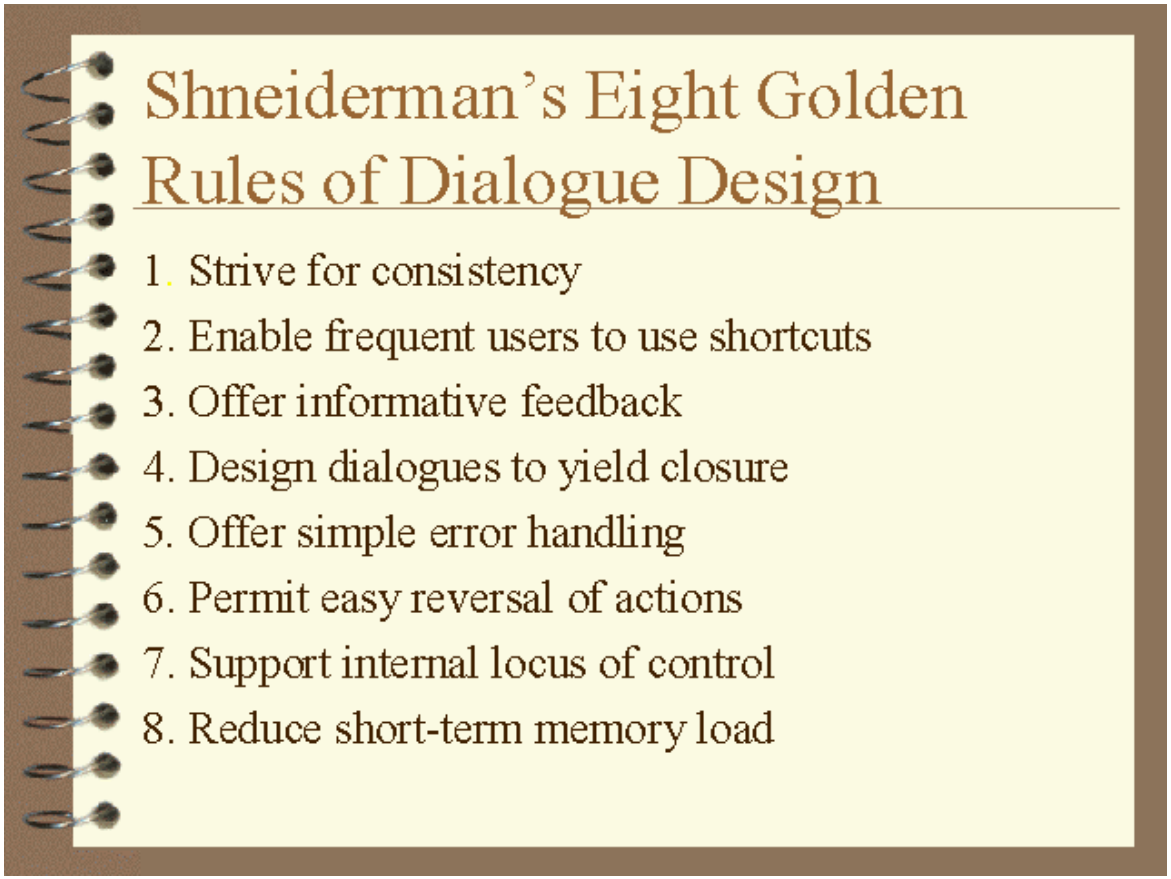
Help Users With Errors

9

Help And Documentation

10

key criteria of Schneiderman



Questions?