



# Evaluating interfaces using heuristics

Jakob Nielsen, Rolf Molich:  
Method for structuring the critique of a system using a set of relatively simple and general heuristics

## Nielsen's 10 heuristics

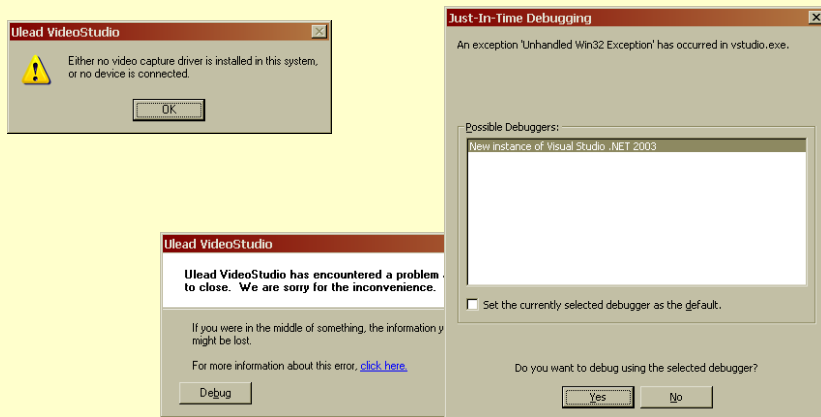
1. Visibility of system status
2. Match between system and the real world
3. User control and freedom
4. Consistency and standards
5. Error prevention
6. Recognition rather than recall
7. Flexibility and efficiency of use
8. Aesthetic and minimalist design
9. Help users recognize, diagnose and recover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



Saul Greenberg

## 1. Visibility of system status

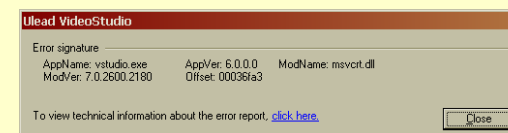
- keep user informed about what is going on
- appropriate feedback within reasonable time



Saul Greenberg

## 2. Match between system and the real world

- system should speak the user's language
- words, phrases and concepts familiar to the user
- omit system-oriented terms
- follow real-world conventions
- make information appear in natural and logical order



Saul Greenberg

### 3. User control and freedom

---

- users often choose system functions by mistake
- they need a clearly marked "emergency exit" without having to go through an extended dialog
- support undo and redo

Saul Greenberg

### 4. Consistency and standards

---

- words, situations or actions should mean the same thing in different contexts
- follow platform conventions and accepted standards

Saul Greenberg

### 5. Error prevention

---

- make it difficult to make errors
- a careful design that prevents a problem is better than good error message



Saul Greenberg

### 6. Recognition rather than recall

---

- make objects, actions and options visible
- the user should not have to remember information from one part of the dialog to another
- instructions for use of the system should be visible or easily retrievable whenever appropriate

Saul Greenberg

## **7. Flexibility and efficiency of use**

- allow users to tailor frequent actions
- accelerators may speed up the interaction for the expert user
- accelerators need not be visible to the novice user

Saul Greenberg

## **8. Aesthetic and minimalist design**

- dialogs should not contain information that is irrelevant or rarely needed
- extra unit of information diminishes the relative visibility of the relevant units of information

Saul Greenberg

## **9. Help users recognize, diagnose and recover from errors**

- error messages should be expressed in plain language (no codes)
- indicate the problem
- constructively suggest a solution

Saul Greenberg

## **10. Help and documentation**

- only few systems can be used without instructions
- provide help and documentation
- easy to search, focused on the user's task
- list concrete steps to be carried out
- not to be too large

Saul Greenberg

## Nielsen's 10 heuristics

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. Aesthetic and minimalist design
8. Help users recognize, diagnose and recover from errors
9. Help and documentation



Saul Greenberg

## Interface Design and Usability Engineering

