

INTERACTION DESIGN 2017

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# HEURISTIC EVALUATION

# GETTING STARTED

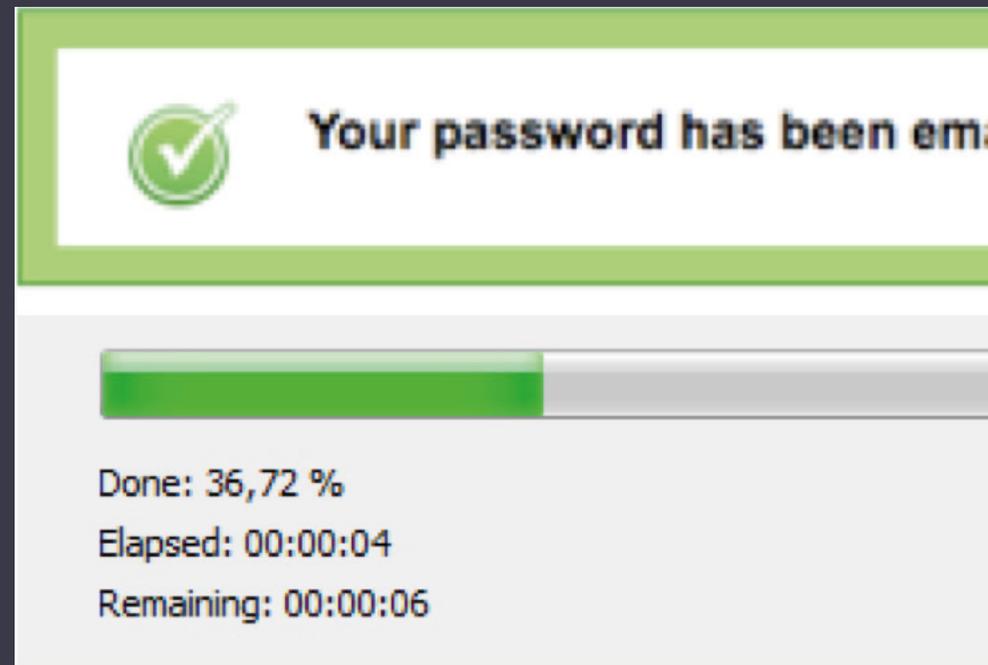
## Goals of Today:

1. Get familiar with a discount usability method: Niensens' 10 heuristics
2. Conduct and document a heuristic evaluation
3. Reflect

# NIELSENS' 10 HEURISTICS

## 01. VISIBLITY OF SYSTEM STATUS

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.



# NIELSENS' 10 HEURISTICS

## 02. MATCH BETWEEN SYSTEM AND THE REAL WORLD

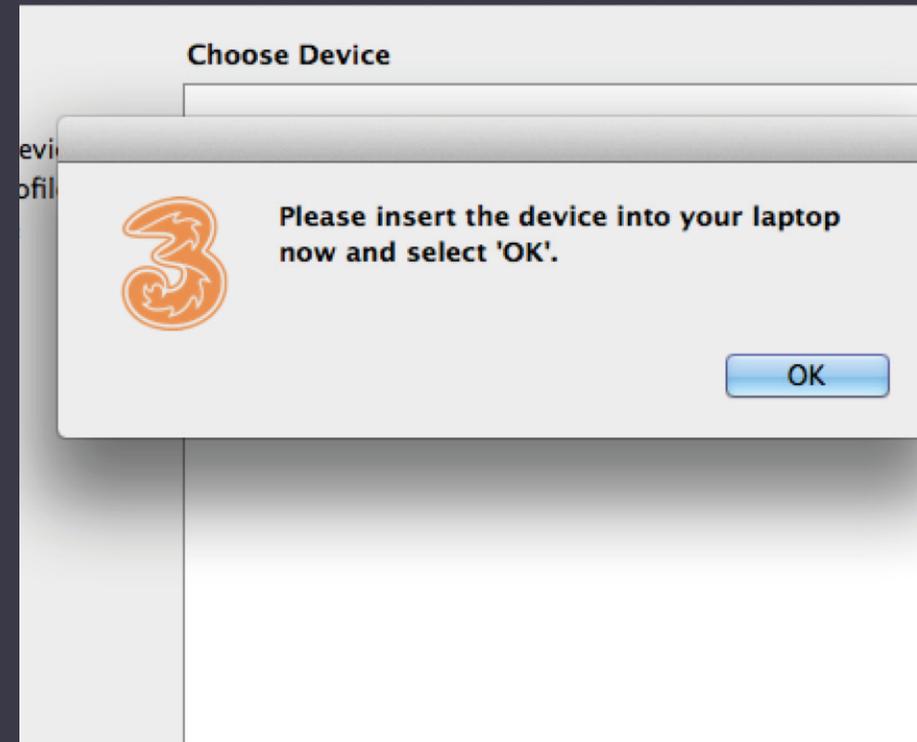
The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.



# NIELSENS' 10 HEURISTICS

## 03. USER CONTROL AND FREEDOM

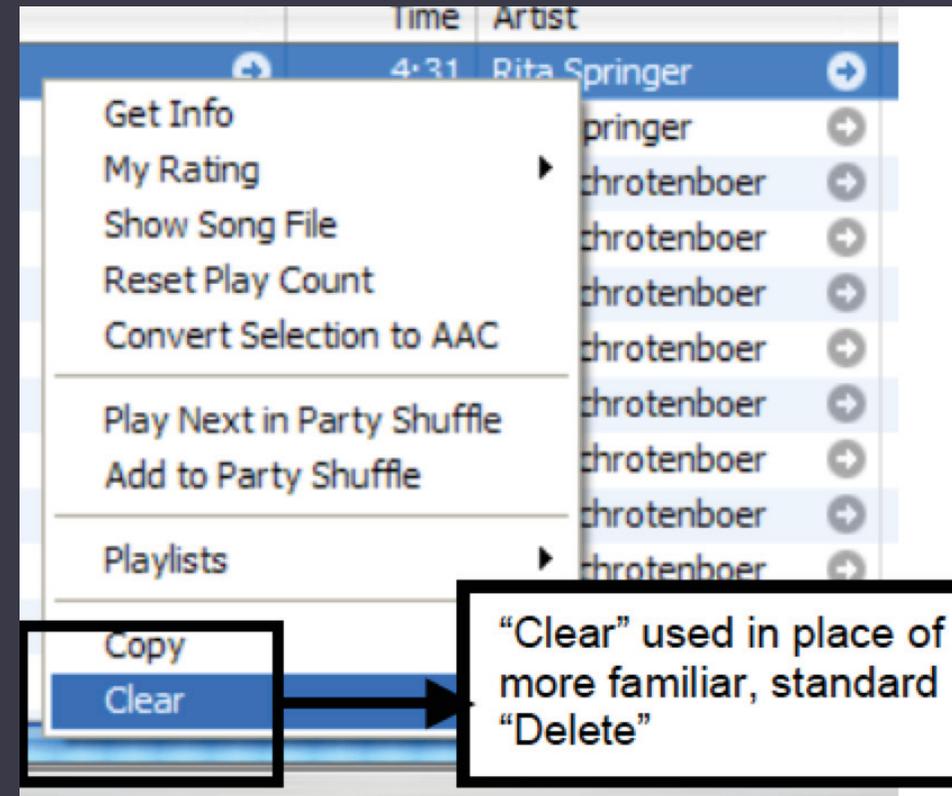
Users often choose system functions by mistake and will need a clearly marked „emergency exit“ to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.



# NIELSENS' 10 HEURISTICS

## 04. CONSISTENCY AND STANDARDS

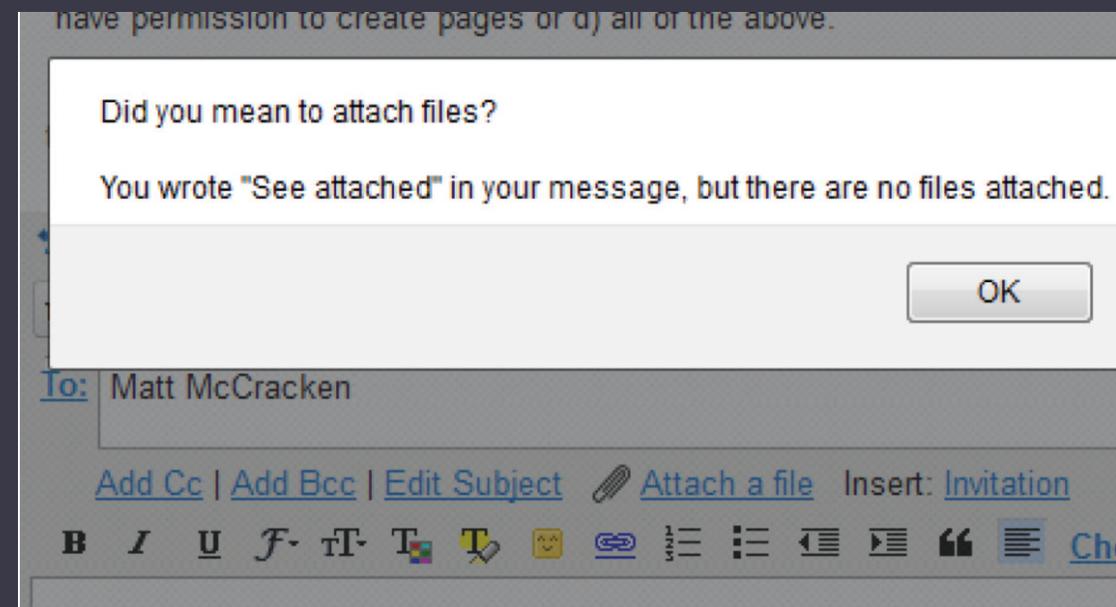
Users should not have to wonder whether different words, situations, or actions mean the same thing.



# NIELSENS' 10 HEURISTICS

## 05. 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.



# NIELSENS' 10 HEURISTICS

## 07. FLEXIBILITY AND EFFICIENCY OF USE

Accelerators – unseen by the novice user – may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

### Keyboard shortcuts

#### Actions

F	Favorite
R	Reply
T	Retweet
M	Direct message
N	New Tweet
Enter	Open Tweet details
L	Close all open Tweets

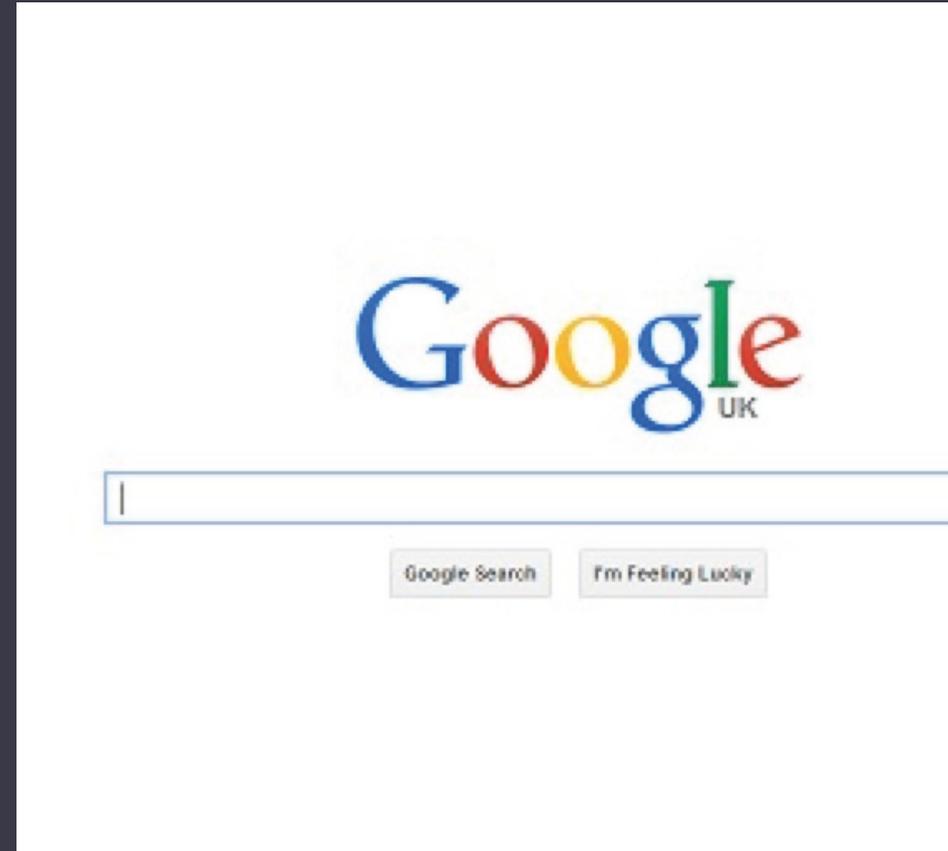
#### Navigation

?	This menu
J	Next Tweet
K	Previous Tweet
Space	Page down
/	Search
.	Load new Tweets

# NIELSENS' 10 HEURISTICS

## 08. AESTHETIC AND MINIMALIST DESIGN

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.



# NIELSENS' 10 HEURISTICS

## 09. HELP USERS RECOGNIZE, DIAGNOSE, AND RECOVER FROM ERRORS

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Please ensure all fields highlighted in red are filled.

Email: \*

Telephone:

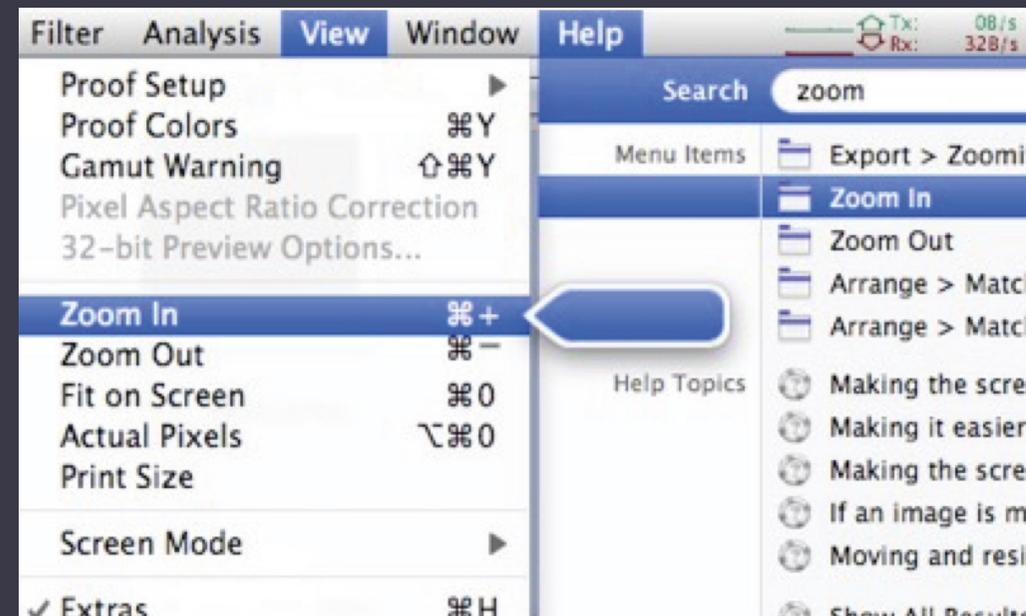
D.O.B:

Select the nature of your request:

# NIELSENS' 10 HEURISTICS

## 10. HELP AND DOCUMENTATION

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.



# NIELSENS' 10 HEURISTICS

01. Visibility of system status
02. Match between system and the real world
03. User control and freedom
04. Consistency and standards
05. Error prevention
06. Recognition rather than recall
07. Flexibility and efficiency of use
08. Aesthetic and minimalist design
09. Help users recognize, diagnose, and recover from errors
10. Help and documentation

# EVALUATE YOUR PROTOTYPE

1. **BRIEFING**  
Introduce scenario
2. **EVALUATE**  
Each evaluator goes through the interface at least twice (1) get an overview, (2) focus on heuristics and document usability issues.
3. **DEBRIEFING**  
Compare and discuss findings in focus group

# GIVE USEFULL FEEDBACK

- Describe the evaluation as good as possible – positive comments as well as criticisms
  - Include heuristics
  - Be tactfull: *(not: „the menu organization is a complete mess“, better: „menus are not organized by function“)*
  - Be specific: *(not: „text is unreadable, better: „text is too small, and has poor contrast“)*
  - Rate Errors on severity scale and contributing factors
    - Cosmetic: no need to be fixed
    - Minor: needs fixing but low priority
    - Major: needs fixing and high priority
    - Catastrophic: imperative to fix
  - Give recommendations for improvements
- |  |                                     |
|--|-------------------------------------|
|  | Frequency: How common?              |
|  | Impact: How hard to overcome?       |
|  | Persistence: How often to overcome? |

# TODO

## TASK TODAY:

Exchange to other groups and evaluate each others prototypes (every group has to document their findings conducted by the evaluator)

## HOMEWORK:

Conduct your findings (heuristics and severity scale) and talk about improvements (presentation next break out session)