# **Ten Usability Heuristics**

#### by Jakob Nielsen

These are ten general principles for user interface design. They are called "heuristics" because they are more in the nature of rules of thumb than specific usability guidelines.

# 1. Visibility of system status

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

# 2. 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.

#### 3. 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.

# 4. Consistency and standards

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

# 5. 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.

# 6. Recognition rather than recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

# 7. 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.

# 8. 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.

# 9. 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.

# 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.

# **Review Usability Best Practices**

# 1. Visibility of system status (Feedback)

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

#### 1.0 BaseCamp by 37signals

The upload button is enabled, until clicked. Then it is replaced with a progress indicator until the file has finished uploading



#### 1.1 Picnik

Progress message and indicator shows while the application loads



# 1.2 Tick

A feedback message is displayed when an action is performed



# **1.3 Windows Live Account**

Password strength is shown as the password is entered



# 2. Match between system and the real world (METAPHOR)

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.

#### 2.0 iTunes

Organized as a library that contains your media library: music, movies, shows, audibooks. Beneath the Library is the Store where you can buy more media to put in your Library.

LIBRARY	
Music	
Movies	
TV Shows	
Podcasts	
Audiobooks	
Applications	
Radio	
STORE	
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#### 2.1 Mindomo

The branches and hierarchy of a mind map can be easily reorganized visually in a non-linear manner. An outline would never work, but this matches the paradigm exactly.



# 3. User control and freedom (NAVIGATION)

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. Supports undo and redo and a clear way to navigate.

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#### 3.0 CollabFinder

Search is easy to open, enter info, execute or cancel.

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# 3.1 Wufoo

Clearly marks where the person is and where they can go by showing the selection in each menu

	A	B	C	D
1	Item	Quantity	Price	Total
2	Tacos	40	\$5.0	-82.0
3		Ĭ		

# 3.2 Pages (Apple's Word Processing Product)

Cell editing shows row and column ids, and the cells used in the equation. The equation can be saved or canceled.



#### 3.3 Balsamiq

Undo and Redo buttons are available in the toolbar, and can also be accessed with the standard keyboard shortcuts

# 4. Consistency and standards (CONSISTENCY)

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



#### 4.0 Gmail

When Gmail was designed, they based the organizational folders on the same ones used in client email applications: Inbox, Drafts, Sent Mail.

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#### 4.1 Microsoft Office

Word, Excel, and PowerPoint all use the same style toolbar with the same primary menu options: Home, Insert, Page Layout... Consistency results in efficiency and perceived intuitiveness.

# 5. Error prevention (PREVENTION)

Even better than good error messages is a careful design, which prevents a problem from occurring in the first place.

(instances)
Update

#### 5.0 Yammer

Disables the update button after it is clicked, so the person cannot update the post twice by accident



#### 5.1 Example from "Web form Design:Filling in the Blanks" by Luke W.

Make the primary action prominent with a larger click area. Cancel and secondary actions are just shown as links

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#### 5.2 Google Auto Recommend

The auto recommend feature cuts down on mis-spellings

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#### 5.2 Wikpedia

Auto focus on input prevents a common source of frustration, typing only to realize nothing is displayed because the field did not have focus.

# 6. Recognition rather than recall (MEMORY)

Minimize the user's memory load. Make objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

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#### 6.0 Quanta IDE

Type ahead for coding in a development environment

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	Baghdad	
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	Baskerville	
	Baskerville Old Face	
	Bastion	
	Batang	

#### 6.1 Keynote

Previews the fonts you can pick from, instead of just the font name.

# 7. Flexibility and efficiency of use (EFFICIENCY)

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.

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# 7.0 OmniFocus

List of keyboard shortcuts and accelerators

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Beige	6	Variance	0.00086	0.00138
Ledger	7	Alpha	0.05	0.05
Bue		T-value	2.26	2.26
Bive Fill	9	Confidence interval	0.01820	0.02304
Cravity *	10	Upper limit	1.82620	1.87704
23.2264292787289	11	Lower limit	1.78990	1.80096
1.78664840605607	12	T-interval	0.02100	0.02659
0.0008622222222	13	Upper limit	1.82900	1.88059
10	14	Lower limit	1.78700	1.82741

# 7.1 Numbers- Apple's Spreadsheet product

Previews common function results on the left when a column is selected, more efficient that clicking on an action in the toolbar.

# 8. Aesthetic and minimalist design (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. Visual layout should respect the principles of contrast, repetition, alignment, and proximity.



#### 8.0 Kontain

Kontain' search menu exemplifies the four principles of visual design: Contrast: bold text is used for the two labels in the search Repetition: the orange, blue, and green text match the media types Alignment : strong left alignment of text, right aligned drop down Proximity: a light rule is used to separate tags from the other options

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#### 8.1 Harvest

Sufficient padding and spacing keep this timesheet from being a visual nightmare. Header and footer rows, as well as the summary column use subtly different colors to indicate they are distinct from the content.

# 9. Help users recognize, diagnose, and recover from errors (RECOVERY)

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



#### 9.0 Digg

Provides immediate feedback with specific instructions



#### 9.1 Humorous ' Page Not Found' Error

Uses a funny image and copy, but provides viable alternatives (article listings and blog link) and a course of action (report it)

# 10. Help and documentation (Help)

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.



#### 10.0 Picnik

Contextual help (this is an example of help in the 'Collages' module) tips in Picnik are clear and easy to navigate



# 10.1 GoodBarry

Embedded videos can be used to showcase features as well as get people started using the product



#### 10.2 Zenoss

Help tips are displayed on hover, answering the most likely questions about a field or instructions



#### 10.3 BaseCamp by 37signals

Help opens a new browser window/tab with a full set of help resources: search, FAQ, video tutorials, customer forums

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source: http://designingwebinterfaces.com/6-tips-for-a-great-flex-ux-part-5