WIMP

Windows,Icons, Menus andPointing device("windows, icons, menus and pointing device"),

WIMP interfaces allow the user to interact with the system from the computer screen using a pointing device (the mouse), and interface elements such as windows, drop-down menus and icons, which represent actionable controls. We are therefore talking about a graphical interface with direct manipulation.

1.Windows

Most human-machine interfaces use windows, ie the screen is divided into several zones managed independently by multi-windowing software. Each window brings together a set of objects that will serve as tools for dialogue between the user and the software.

- **The use of windows must not disrupt the "business" task.**
- **Make it easier to activate and open windows.**
- **Highlight active window**

Due to its specific role, this window must be able to be clearly distinguishedofstayofthe app.

- **Allow memorization of a window arrangement.**

Of course, being able to organize the arrangement of the windows as you wish is only a real gain to the extent that this operation does not have to be repeated over and over again.eachnew session.

- **The fewer windows there are, the more complex they are.**

Increase the number of windows for infrequent use.

At constant perimeter, when there are many windows, they display less data. They are individually simpler and clearer, somoreeasyhaslearn.

- **Reduce the number of windows if used frequently.**

Repeated use of the software helps the user understand the complexity of each window. The latter will appreciate the reduction in windowing operations, which will allow them to gain speed.

- **Minimize the amount of information to be memorized from one window to another.**

To reduce memorization work, it is preferable that all information relating to a task be placed in the same window.

Windows dialog

The dialog window allows the user to view and modify a set of data. Once the modifications have been made, buttons are used to trigger processing based on the parameters defined in the window.
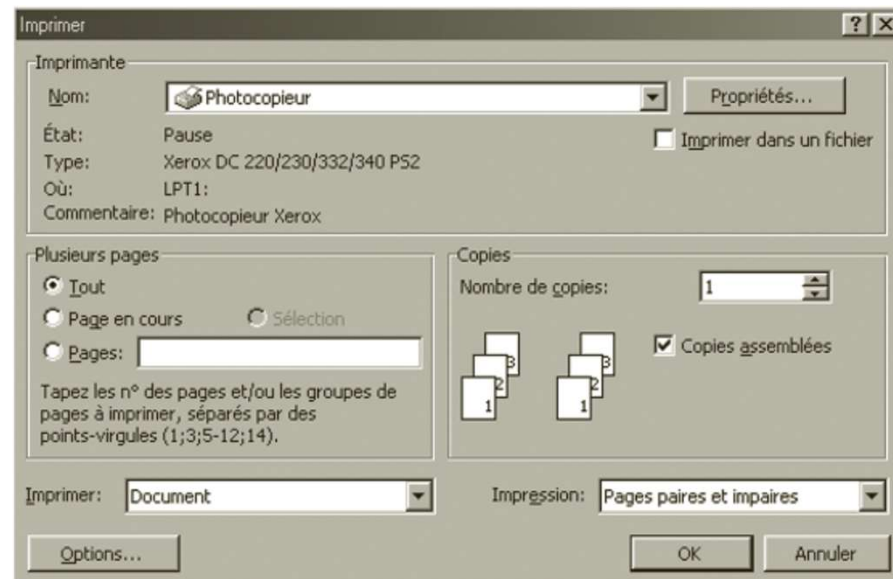
- **Present only information relevant to the task.**

Bon de commande

1. Jean Buffalo Boy	422,00 F.
2. Jean Buffalo Boy	422,00 F.
3. Jean Buffalo Boy	402,00 F.
4. Pull Grands Flots	253,00 F.
5. Pull Grands Flots	203,00 F.

Total : 1702,00 F.

[Ok] [Modifier] [Annuler]

Pour plus de détails,
sélectionner l'article et appuyer sur "Enter"

Déconseillé

Bon de commande

Num	Article	Couleur	Taille	Prix	Qté
1	Jean	Bleu	40	422,00	1
2	Jean	Noir	40	422,00	1
3	Jean	Bleu	36	402,00	1
4	Pull	Vert	XL	253,00	1
5	Pull	Bleu ciel	M	203,00	1

Total : 1702,00 F.

[Ok] [Modifier] [Annuler]

Pour plus de détails,
sélectionner l'article et appuyer sur "Enter"

Préférable

- **Present the components in the order of use**

The most natural input order is the reading direction, that is, top to bottom and left to right. This makes entry faster because the window components are read in the order the user needs them.

- **Facilitate access to the most frequently used window components.**

Typing in a window is faster overall when the most frequently used components are easy to select.

- **Highlight the most important elements.**

The key elements of the window must be clearly visible to the viewer.the user.

Déconseillé   Préférable

- **Group commands according to their meaning or the purpose to which they relatereport.**

PRODUITS RÉGIONAUX		Produits Régionaux	
RÉGION : SUD-OUEST		Région : Sud-Ouest	Disponibilité : 36 h
DISTRIBUTEUR : C. COIN		Distributeur : C. Coin	Tarifs jusqu'au : 15/01/99
DISPONIBILITÉ : 36 H	TARIFS JUSQU'AU : 15/01/99		
PÂTÉS AU FOIE GRAS	PRIX	Pâtés au Foie Gras	Prix
FOIE DE CANARD 65 g	19,50	Foie de Canard 65 g	19,50
FOIE DE CANARD 130 g	37,00	Foie de Canard 130 g	37,00
FOIE D'OIE 65 g	14,50	Foie d'oie 65 g	14,50
FOIE D'OIE 130 g	25,00	Foie d'oie 130 g	25,00

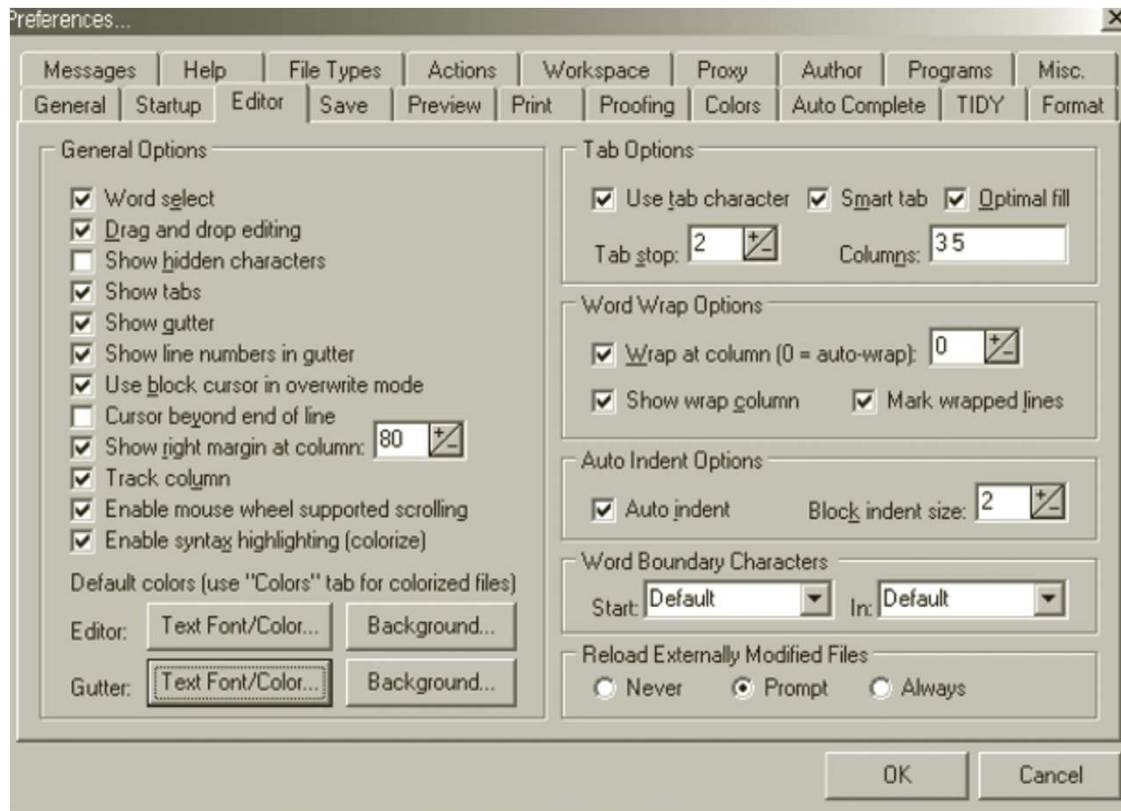Déconseillé   Préférable

Grouping makes the window easier to understand. For this, several typographical devices were implemented art work: rapprochement, supervision and police characters.

- **Give a title to each group of objects.**

Assurance automobile

Assuré		Véhicules	
Nom :	_____	Automobile 1	
Adresse :	_____	Marque :	_____
Code postal :	_____	Type :	_____
Ville :	_____	Immatriculation :	_____
		Automobile 2	
		Marque :	_____
Conducteurs		Type :	_____
Nom :	_____	Immatriculation :	_____
Nom :	_____		
Nom :	_____	[Annuler]	[Valider]
Nom :	_____		

- **Avoid windows that are too wordy.**

When the window is too rich, the user is lost. Rather than displaying all the information, it is preferable to sort it.

- **Provide ahelpcontextual.**

Déconseillé   Préférable

The right window is less busy because the explanatory text is only displayed on demand when the user places the mouse pointer above the relevant field. Thus, the help message can be richer without overloading the work area.
- **Use short, unambiguous titles.**
- **Standardize the terms and syntax used in all application windows.**
- **Decrease the seizures keyboard.**
- **To guide the user.**

Learning the dialog window is made easier by explanatory texts and the display of pop-up messages in the status bar.

1.2. Buttons

A button is used to trigger a command with a mouse click. It takes on a grayed out appearance when inactive. Its main interest is to allow fast access to orders.
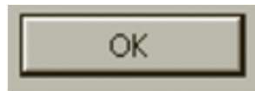
- **Use buttons for frequently used commands.**

As the button is permanently visible, it is immediately accessible. It requires a single click to trigger the command. The resulting gain in speed is all the more significant as the command is used frequently.
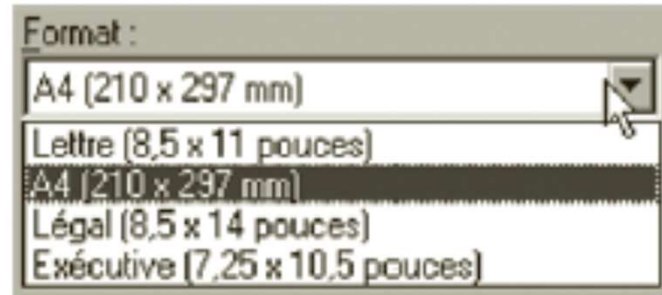
- **Specify the title of the command in full in the button label.**

1.3.Components of selection

In a window, different components will allow you to choose from a set of data: the selection buttons, which we call *radio buttons* Or *check box* depending on whether the choices are exclusive or not, the selection list and the list simple.

Boutons de sélection   Liste de sélection   Liste

- **Use the selection buttons for frequent and few choices.**

- **Use the selection list when space is limited and choices are infrequent.**
The picklist may contain more choices. But they have less direct access than the selection buttons (2 clicks). However, it has the advantage of occupying less space on the screen.

- **Use the list when the set of possible choices is variable.**
The list can contain a large number of elements. It is particularly useful when you do not know *a priori* the number of possible choices, but the selection is difficult because the user must use the scroll bars.

- **Present selection components vertically.**

It is best to arrange choice items vertically to reduce search time by minimizing eye movements made during the comparison.

Choice of components Selection

	Jusqu'à 5-6 choix	Jusqu'à 10-12 choix	Place réduite	Plus de 12 choix	Les choix peuvent changer
Bouton de sélection	X				
Liste de sélection	X	X	X		
Liste				X	X

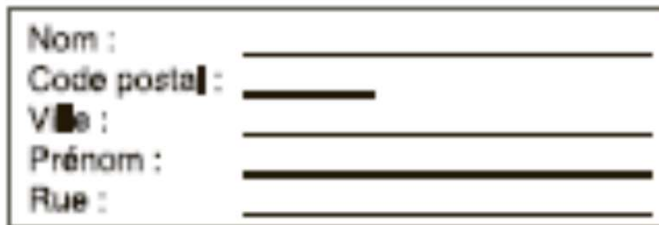The input field allows the user to provide information to the site (software).

When filling out an input field, the user focuses on this small area of the screen. You should therefore be careful to place in this reduced space all the data necessary for correct entry.
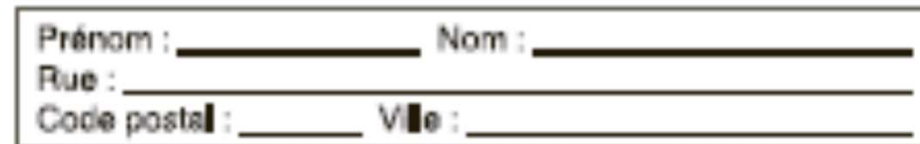

Recommendations

- **Choose the shortest possible wording.**
- **Present input fields consistently compared to other mediaof work.**

Déconseillé   Préférable

- **Propose the most common value by default.**

Typing requires some keyboarding experience. It is often perceived as a tedious activity, especially when it is repetitive. It is therefore recommended to pre-fill the field with the most frequent value or the last value entered. Optionally, a list *historical* can also provide access to all of the latest entries.

- **Prevent input errors.**
- **Let the user choose the units.**

Input is easier when the user works according to their habits; he
makes fewer mistakes and learns more easily

- **Specify the entry format.**

Depending on the case, the units, syntax or maximum number of characters of the field will be indicated, if necessary.

Heure [:] hh:mm

- **Indicate the optional input fields and those that are mandatory.**

Distinguishing optional fields from mandatory ones through a different presentation helps the user understand how the system works and avoids errors.

1.4. 1. Forms

The forms scare the Internet user who sometimes sees them as a kind of test. Indeed, until now, on the other pages of the site, he was a consumer of information; here he becomes a supplier. In a way, he takes more risks. The stakes are high because passing the form generally allows it
to realize a series of operations which, for the moment, had remained virtual. This is typically the case when providing information finalizing an online purchase.

Recommendations

- **Structure your form**

There**proximity law**(Or**Gestalt law**) is an essential rule in ergonomics. There**proximity law**indicates that items that are placed close to each other tend to be perceived as a single unit.

- **Position your entire form on a single column**
- ✓ Do not make colonizationin which the user is required to zigzag between fields;
- ✓ Position your form labels above the field or on the same line but aligned to the right (so that the field label sticks to the field itself);

- **Group your form into different visual areas if it is made up of many fields**

This avoids an indigestible list of fields on which the eye does not know where to rest.

- **Create a multi-step form**

We also call it the**function "Wizard"**. In this case, be sure to position an explicit thumbnail at the top of the form to show the number of steps planned, and allow navigation within these steps to return**correct a possible error**.

- **Visually prioritize your different action buttons**
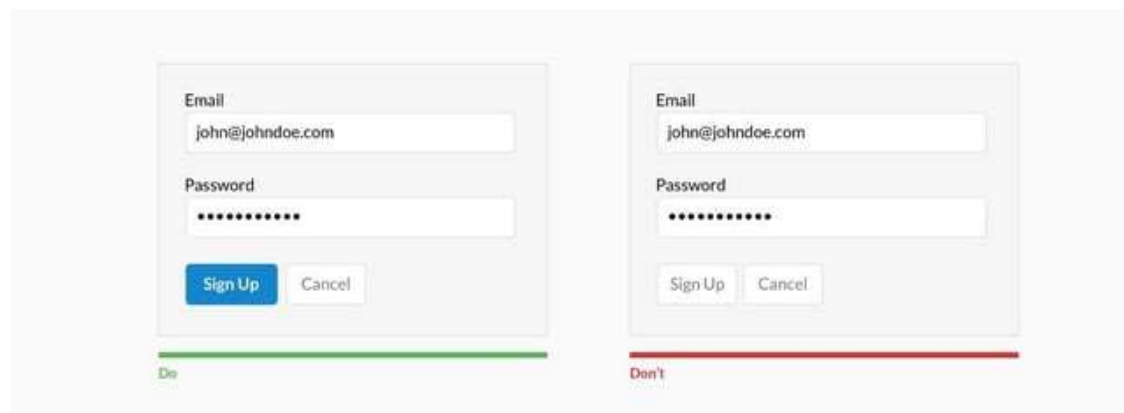
- **Make sure the TAB key allows you to move from one field to another**

- **Don't put the "cancel" button next to the main action button**

The user may hesitate between the consequences of these two actions placed side by side. And, in general, do not suggest to your Internet user to delete/cancel. This is often misunderstood and a source of error. Simply suggest a**go back**.

- **Start from the general to arrive at the particular**

Ask for them**main fields first**And**then ask more specific or complex questions**. It is easier to request a complex action once the actions perceived as easy have been carried out

- **Size the size of your fields according to the length of the expected response!**

So, when entering a postal code, shorten the field, this will give implicit information to the user that the field must only contain 5 digits.

- **Indicate the obligatory fields**

THE**symbol ***is well integrated, but must be positioned at the label level.

- **Use simple captcha functions!**

The Recaptcha from Google is today the most ergonomic solution. This saves the user from tearing their hair out over a captcha that they have to enter twenty different times. But, generally speaking, if you can avoid it, don't use captcha. Numerous studies demonstrate the**very negative impact of captcha on conversion rates.**

- **If sensitive information is requested, explain why!**

- **Work with wordings of your submit buttons**

The most common mistake is to display a submit button with the label "Send" or "Ok". A term that is far too vague, this word does not reflect the real action of the Internet user. Sure, it sends data, but what is the underlying action? He signs up ? He pays ? He downloads?...

- **Design your forms mobile first**

L'**mobile-first approach**is key to guaranteeing efficiency in mobility situations. It is always easier to then decline for desktop than to move to mobile after creating a desktop form.

2. Icons

A text is more explicit than an icon to designate a command. However, it usually takes up more screen space and has the disadvantage of being language dependent.

The main benefit of an icon is probably that it is language independent. However, it is important to be vigilant about the cultural connotation associated with certain graphics. For example, a French person will not necessarily see a mailbox in the following icon.

►Association representation chart / meaning

   ► resemblance

   ► description

   ► example
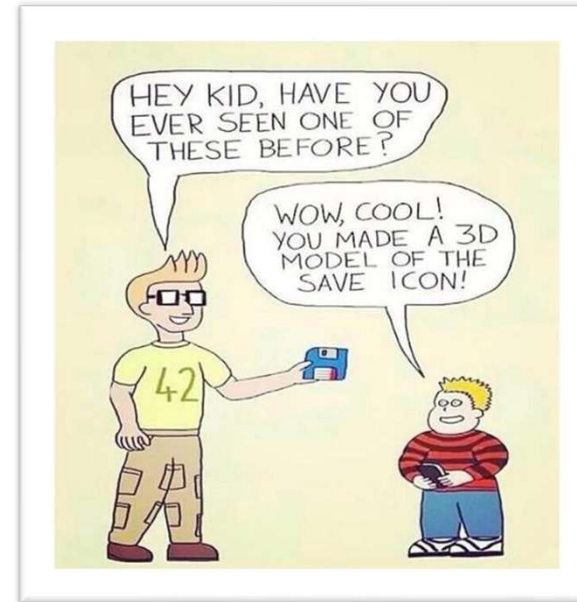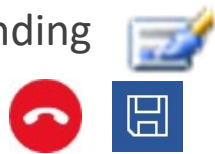
   ► metaphor
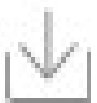
   ► analogy (cut = scissors)

   ► symbol

   ► arbitrary

Disadvantages

- Enumber of the screen
- Difficulty of understanding
- Sustainability

Solutions

- Limitate their number (12 Atbetter,20 max)
- Test THE representations, THE TO DO evol...

Mise en page des diapositives
Modifier la présentation de la diapositive sélectionnée.
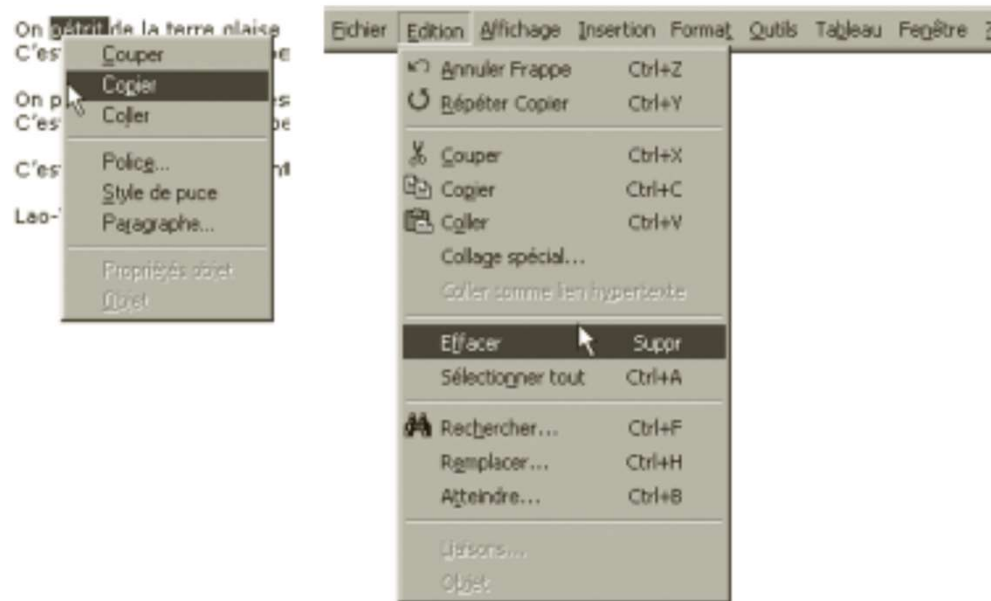
Disposition ▾

- Bubbles help, icons + text

3. Menus

The role of a menu is to present, in a grouped manner, a set of commands.
It can take two forms. If it appears above the interface object that has just been selected, it is a *Contextual menu*.
When called from the window menu bar, it is a *scrolling menu*.

Menu contextuel   Menu déroulant

- **Adjust menu structure to user activity.**

The menu guides the use of the system. The user is easily identified when
the operation of the software, represented through the menu tree,
coincides with its activity, each menu providing an answer to the problem
ofeach operation.

- **Minimize menu size.**

It is recommended not to exceed 10 choices per menu when users are beginners. The menu can be longer for
experienced users, up to 20 items if they are simple and can be grouped. Beyond these values, it is appropriate to
create submenus.

- **Organize menus width first: minimize depth.**

ThereThe way the menu is broken down influences the access time to an item. [Miller 81] showed that performance is
better with a rather wide menu.that in depth.

- **Organize the menu according to use.**
- *Sequentiality*
- *Frequency of use*
- *Importance*

- **Unavailable commands appear grayed out in the menu.**

- **The window title must be consistent with the menu item.**
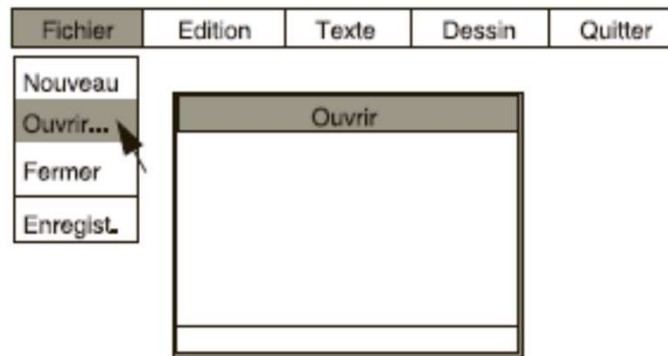
- **Allow quick and direct access to frequent commands via shortcutskeyboard.**

4.Pointers

►To use priority THE **sliders**usual

►**Cursor**different→ actiondifferent

    ► positioning

    ► positioning In A text

    ► waiting

    ► linkhypertext, object clickable

    ► shift

    ► resizing

    ► …