

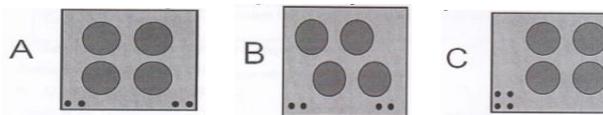
SW 3 : Ergonomic Principles

Exercise 1

- Q1. Why is ergonomics an important criterion for choosing software?
- Q2. What is the objective of Ergonomic Criteria?
- Q3. Give two important recommendations for the ergonomic criterion: error handling?

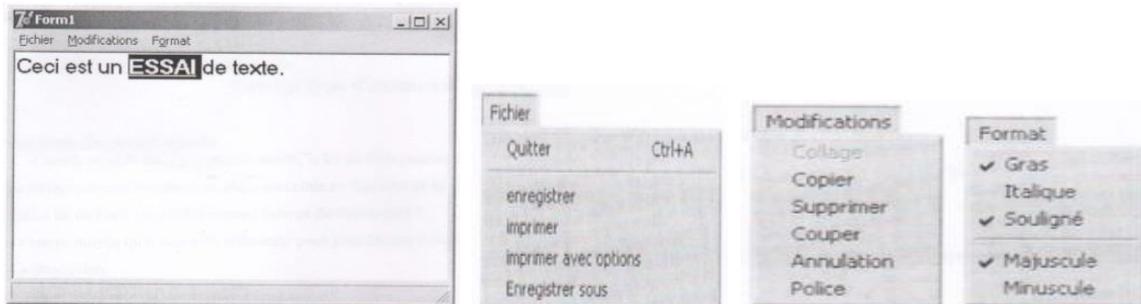
Exercise 2 Card Sorting

Observe the drawings below, which represent different possible configurations for a 4-burner hob. Critique each configuration from an ergonomic point of view.



Exercise 3

List at least four ergonomic flaws in the interface of the software below.



Redraw the menus (without adding new functionalities).

Exercise 4

- Q1. Observe the two input forms below, inspired by a real website. Which of these two versions seems more ergonomic to you?
- Q2. Which ergonomic principle(s) do these improvements address?

Exercise 5

Consider the two examples of pop-up windows activated when requesting to exit a software.

Q1. Which of the two proposed solutions seems more appropriate from an ergonomic point of view?

Q2. Which ergonomic principle is not primarily respected here?

Q3. In your opinion, which situation will most frequently lead to an error in the case of the poorly designed interface?

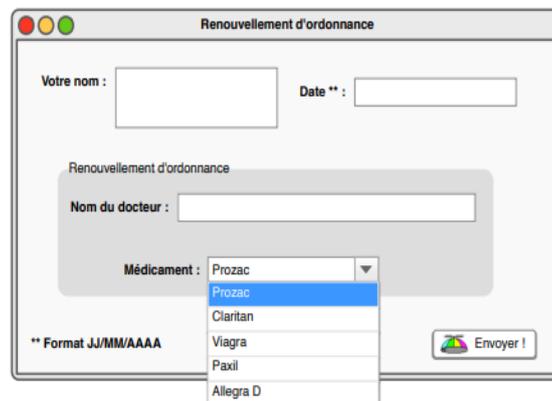


Exercise 6

The interface presented in the following figure allows a patient to request a renewal of their prescription for a given medication.

Q1. Provide a reasoned commentary on the interface based on three usability criteria (you can choose the criteria).

Q2. Propose a new interface design to solve the identified problems.



Exercise 7

1. In Form (a), only the name is required; all other information is voluntary (optional). How can we indicate to the user that they only need to fill in certain fields and can ignore others?
2. In Form (b), which ergonomic criteria (two) are not considered by this form? Explain!

Formulaire(a) is a simple form with three input fields. The first field is labeled 'Nom', the second 'Mail', and the third 'Téléphone'. Each field is a rectangular box with a small cursor icon on the left side.

Formulaire(a)

Formulaire(b) is a more complex form with six input fields. The fields are labeled 'Nom', 'Prénom', 'Date de naissance', 'Age', 'Adresse', and 'Mail'. The 'Date de naissance' field is a date picker, and the 'Age' field is a spinner. The other fields are standard text input boxes.

Formulaire(b)

Complementary Exercise

In a Java Input Form "Input Box":

Boîte de saisie is a Java Swing window titled 'Boîte de saisie'. It contains several input fields: 'Nom', 'Prenom', and 'Adresse' (a text area). To the right of these fields is a list of sports with checkboxes: Tennis, Squash, Natation, Athlétisme, Randonnée, Foot, Basket, Volley, and Petanque. At the bottom, there are radio buttons for 'Sexe' with 'Homme' selected and 'Femme' unselected. There are also 'OK' and 'Annuler' buttons at the bottom.

- The "Cancel" button allows resetting the form fields with a single click. Which ergonomic criterion does this functionality (reset) represent? Explain!
- Is there another way to do this (reset) more optimally?
- How to adopt the three sub-criteria of the ergonomic criterion "Error Handling"?
- A new registered member can select one or more sports to practice within the club. This is translated by the use of checkboxes (JCheckBox). Is there another graphical component that can ensure this multitude of choices?
- If we change the club's strategy so that the newly added member can only select one sport. By which graphical components (list three) can we replace the checkboxes (JCheckBox) representing the sports?
- We wish to add other graphical components (Labels and input fields) to ask the new registered member for the following information (followed by their prompts): date of birth (mm/dd/yyyy),

weight (kg), height (centimeters), age (years). Which ergonomic criteria (two) are not considered in this case (do not think about the "error handling" criterion)? Explain!