

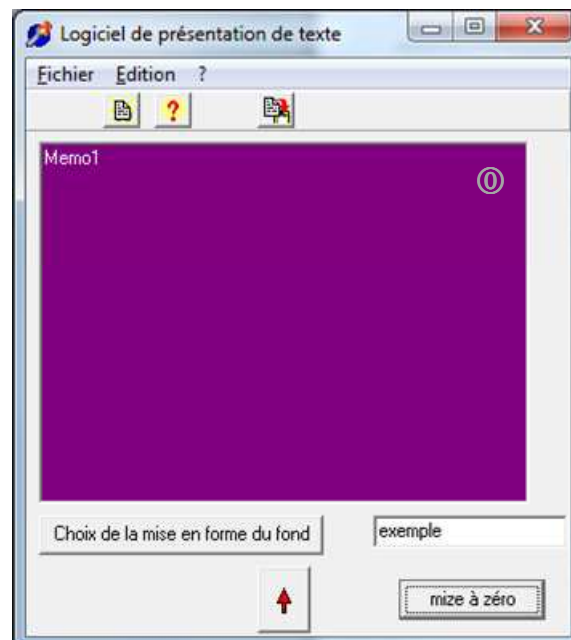
Tutorial Exercises N°03

Exercise N°0 1

Below is the interface of a text formatting program.

The formatting selection is applied to the "exemple" field. Click the vertical arrow to apply it to the text area.

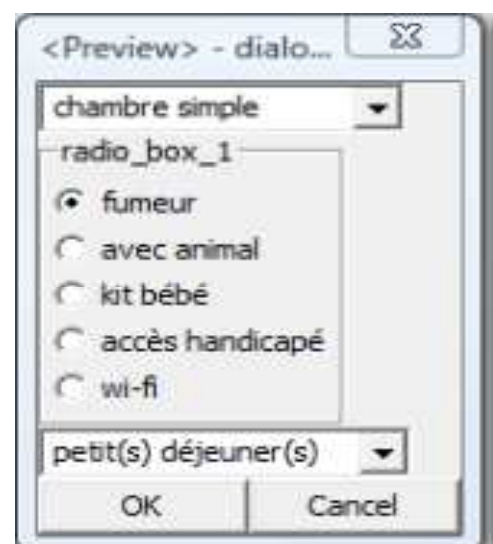
1. Carry out an ergonomic evaluate of this interface by identifying 4 errors. Organize your answers in a table as follows:
First line: describe the error,
Second line : explain the error and specify the ergonomic criterion involved
Third line : propose solution(s) to correct the error.
2. Repeat question 1 with an ergonomic evaluation according to the **12 theories** seen in the course.



Exercise N°2

Criticize this dialog box of booking a room at hotel.

(Give the positive and negative points and suggest solutions to correct them).

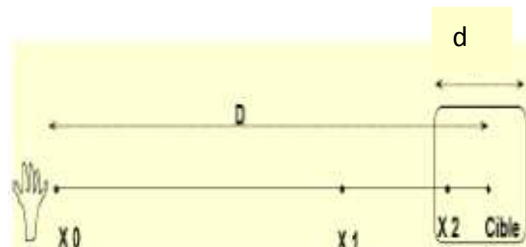


Exercise N°3

Fitts 's Law (Paul Fitts in 1954)

Fitts 's law is a model of human movement. It predicts the time taken to move from a point to a target area, depending on the distance to the target and its size.

$$T = C_1 + C_2 \log_2(2D / d)$$



where

T: the average time taken to perform the movement

D : distance separating the starting point from the center of the target

d : target width

C₁ and C₂ : empirical constants (e.g. C₁=0.05s and C₂=0.1s)

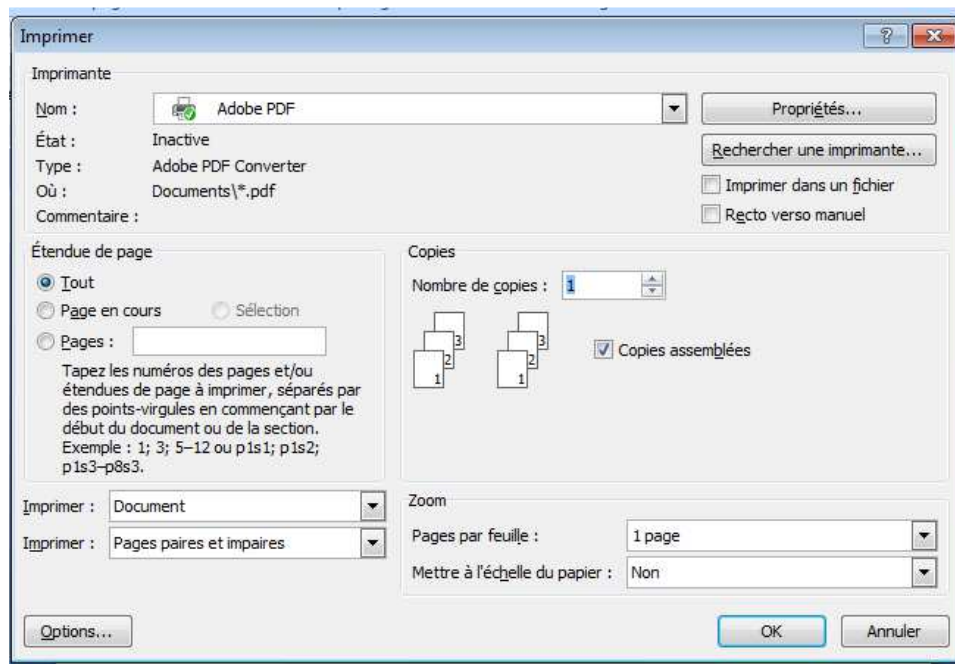
Consider some time intervals (in seconds) measured during an experiment with a particular device. For this device, can you determine (roughly) the values of the experimental constants " C₁ " and " C₂ " used in **Fitts 's** law ?

d \ D	1.00	5.00	10.00
0.10	0.31	0.45	0.56
0.50	0.13	0.30	0.38
1.00	0.07	0.22	0.32

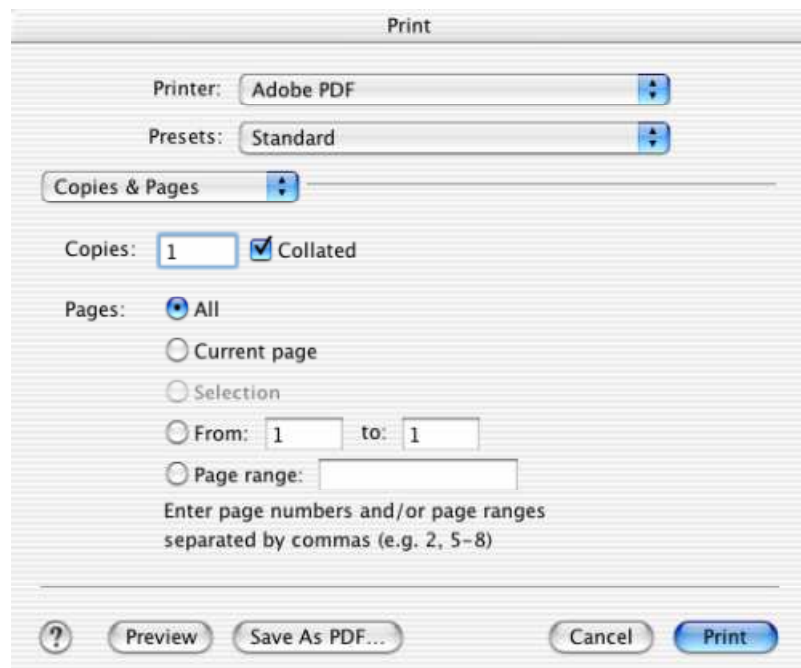
D	1	1	1	5	5	5	10	10	10
d	0,1	0,5	1	0,1	0,5	1	0,1	0,5	1
2D/d	20	4	2	100	20	10	200	40	20
Log ₂ (2D/d)	4,32	2	1	6,64	4,32	3,32	7,64	5,32	4,32

Exercise N° 4

Consider these two dialog boxes that appear when printing under different operating systems. Criticize these two graphical user interfaces.



Microsoft Windows 7



Apple Mac OS X