

## EE 4213 Human-Computer Interaction

Semester A 2008-2009

### Assignment 3

Due Date: 20 November 2008 on Week 12

1. Suppose you are responsible for developing a Web for a large bookstore in Hong Kong. Currently this bookstore does not have a Web and it is expected that book purchase can be performed at this Web. What kinds of data gathering would be appropriate? Why?
2. A Hong Kong based electronics company has recently developed a digital watch with heart rate monitoring function, called Health-Watch. This product is supposed to compete with other similar products by Polar, Timex, Nike and Reebok, which are available in the market. Suggest a usability specification (i.e., *attribute, measuring concept, measuring method, now level, worst case, planned case, best case*) for Health-Watch.
3. Write the GOMS (Goals, Operators, Methods, Selection) for the goal of “move a sentence from one paragraph to another paragraph” using Microsoft WORD.
4. One Man Bank has launched its e-banking services and the homepage outline of the e-banking Web site, with detailed design of the logon dialogue box, is depicted in Figure 1. The five steps to logon to the e-banking system are as follows:
  - (i) Position the mouse to the field of "User name", i.e., the box under it.
  - (ii) Type the user name.
  - (iii) Position the mouse to the field of "Password", i.e., the box under it.
  - (iv) Type the password.
  - (v) Click the "Logon" button, i.e., the button on the left top of the logon dialogue box.

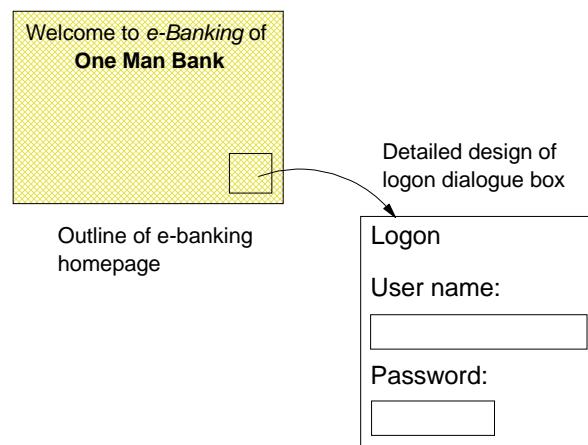


Figure 1

Consider that the character lengths of "User name" and "Password" are 8 and 6, respectively. Using keystroke-level model (KLM), compute the total execution time to logon to the system. Table 1 shows all necessary timing information. It is assumed that the hand is on the mouse at the beginning.

Operator	Action	Time (s)
K	Keystroking	0.1
B	Pressing mouse button	0.1
P	Pointing with mouse	1.0
H	Switching between mouse and keyboard	0.3
M	Preparing mentally	1.0
R	System response	0.0

Table 1