

Current Topics Assignment 2

Current topics in Media Computing and HCI - Assignment 2: keystroke-level GOMS

Due: May 02, 2006 @ 23:59

Description The keystroke-level GOMS model predicts the task execution time for a specified design and task scenario. In this assignment, you will use this model to compare different interface techniques to copy and paste one file. Assume that the file icon is visible in a window (e.g., Finder, Explorer, or a third-party file manager) and can be pointed to. Your hand starts and ends on the mouse. The cursor must end up in the original window that the file icon was in.

Task Develop keystroke-level GOMS models for each of these techniques:

- Copy and paste the file via short cuts key (ctrl-c, ctrl-p)
- Copy and paste the file using a CONTEXT menu (e.g. right click)
- Copy and paste the file using the FILE menu.
- Analyze one combination of the above techniques. For example, copy via short cut keys and paste via CONTEXT menu.

Now consider the case where multiple files are copied using a bounding selection box. Will this affect your calculations? Note, you do not need to perform the calculations for this. Simply justify your answer.

Which techniques would you implement in a humane interface? Explain why.

Use the following average interface gesture timings for your computations:

1. K = 0.2 sec (tap a key on the keyboard)
2. P = 1.1 sec (point with the mouse to a target on the display)
3. B = 0.1 sec (press or release a mouse button)
4. BB = 0.2 sec (click a mouse button)
5. H = 0.4 sec (move hands to keyboard or mouse)
6. M = 1.35 sec (prepare mentally for the next step)

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Submission Prepare a small report (no more than 1 or 2 pages total) that shows the developed keystroke-level GOMS models for each technique. List for each model the required gestures to perform the copy as well as the operators and the rules that you apply.

You may complete this assignment on your own or in groups of two. Please submit your assignment electronically (only one assignment per group) Include the names and matriculation numbers of all group members in your submission. Email a pdf copy of your assignment to holman@cs.rwth-aachen.de with subject "ct assignment 2." Name your file "ct06-lastnames.pdf"