

Some Formulas to Make Time Predictions

Fitts' Law and the Keystroke-Level Model

Evan Golub

Fitts' Law

- The time that it takes to point at an object is a function of the distance to that object and the width of that object.
- Several variations on the formula exist.
- Basic Idea: The further away and smaller the target, the more time it will take the user to be able to click on it.

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Keystroke-Level Model

- Used to predict the amount of time it will take to perform a certain task.
- Discusses and estimates time for actions such as:
 - Pressing keys
 - Moving the mouse
 - Pressing buttons
 - Moving between keyboard and mouse
 - Typing a sequence of letters
 - “Mental activity” between certain steps
 - System response delay

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Deleting a File

- If you want to discuss something like deleting a file, Fitts' Law can discuss parts, but not the whole thing. Why not? What aspects are missing?
- Steps:
 - Point to the file you want to delete
 - Press and hold left mouse button
 - Drag file to trash
 - Release mouse button
- Are there steps missing above?
 - Return to pointing at the window where you started?
 - Move any window that is blocking the trash can?
- How would you describe using the **File** menu to delete?
- How would you describe using the context menu to do it?

Evan Golub