Keyboard Stroke Level Model

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Prototype: WIP

Tasks:

1. From edit mode, create four loop cuts on a cube mesh.
2. While in object mode, apply smooth shading to an object.

K = .28 sec
B = .1 sec
P avg = 1.1 sec
M avg = 1.2 sec

Prototype KSLM:

Task 1

1. Tap the “spacebar” - K
2. Point to the “loop-cut” radial option - P = 1.1
3. Press and release the mouse button - BB
4. Point to the “4” radial option - P = 1.1
5. Press and release the mouse button - BB
6. Point to the area of the object to loop cut - P = 2 (high level of precision required)
7. Press and release the mouse button - BB

K + 3 P + 6B = .28 + 4.2 + .6 = **5.08 sec**

Task 2

1. Tap the “spacebar” - K
2. Point to the “smooth” radial option - P = 1.1
3. Press and release the mouse button - BB

K + P + 2B = .28 + 1.1 + .2 = **1.58 sec**

Default KSLM:

Task 1

1. Point to the “loop-cut” button - P = 1.5
2. Press and release the mouse button - BB

3. Point to the area of the object to loop cut - P = 2
4. Press and release the mouse button - BB
5. Point to the right arrow associated with the “number of cuts” field - P =2 (high level of precision)
6. Press and release the mouse button 3 times - BB * 3

P + 10 B + P + P = 1.5 + 1 + 2 + 2 = **6.5 sec**

Task 2

1. Point to the “smooth shading” button - P = 1.5
2. Press and release the mouse button - BB

P + 2B = **1.7 sec**

References:

http://www.cs.loyola.edu/~lawrie/CS774/S06/homework/klm.pdf

- Fitts’ Law Average Pointer movement time = 1.1 seconds