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AFB

Marking Guide for HCI question

2000

Part 1: Cognitive Walkthrough

Identification of intended user	1 mark
Description of user's knowledge	1 mark
Mention of user's goal	1 mark
Mention assumption of representativeness of this task	1 mark
Summaries of required sequence of actions for each method	2 marks
Mention of accessibility of actions	2 marks
Critical evaluation of match quality	2 marks
Critical evaluation of feedback quality	2 marks
Total	12 marks

Part 2: Fitts' law

Qualitative description of Fitts' law (log law, dependent on target size and distance)	2 marks
Mention of relation to Keystroke Level Model / MHP	1 mark
Suitable for expert users / repetitive actions	1 mark
Total	4 marks

Part 3: Alternative design techniques

1 mark for each mention of a reasonable design technique
1 mark for improvements that are justified with reference to course material
No marks for improvements proposed with no justification
Total: up to 4 marks

ADVANCED GRAPHICS - HCI
SAMPLE ANSWER

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PART 1.

ASSUMPTIONS: ANALYSIS FOR FIRST TIME USER OF
MS WORD. RELEVANT KNOWLEDGE - FORMAT
OF BOOKS.

ALTERNATIVE A:

CORRECT PROCEDURE - SELECT VIEW / ~~Header & Footer~~
CLICK "#" ICON TO INSERT NUMBER,
CLICK HAND ICON TO FORMAT, CLICK DOWN
ARROW TO START AT 0.

WORKTHROUGH:

- a) VIEW MENU - NOT CLEARLY RELATED TO
PAGE NUMBERING (FORMAT MENU MIGHT BE)
SO ONLY LIKELY TO FIND BY SEARCHING
THROUGH ALL MENUS
- b) FEEDBACK - DEPENDS ON MENU ITEMS.
NOTION SEEMS RELATED TO SUBBOLD
- b) HEADER & FOOTER BEST OPTION, IF THIS
IS WHERE YOU WANT NUMBER FEEDBACK
IS TOOLBAR, NOT CLEARLY RELATED TO
PAGE NUMBER
- c) # BUTTON DOESN'T REALLY LOOK LIKE
PAGE NUMBER - LOOK WITH NUMBERS
ON MENU LIKELY. FEED TOOLBAR
GIVES CORRECT ADVICE ON POINTING
DIALOG CONFIRMS CORRECT MENU

- d) "START A" IS CLEARLY RELEVANT.
NAV TYPE IS ZERO, LATER THAN
USE DONT APPROD. DOES PAGE NUMBER
APPEAR IN NAV SCREEN IN RESPONSE?

ALTERNATIVE B

CORRECT PROCEDURE:

123456789 → PAGE NUMBERS, CLICK
"FORMAT" BUTTON & DIALOG, THEN
AS ALTERNATIVE A

WALKTHROUGH:

- 1) "123456789" ALSO NOT CLEARLY RELATED
FEEDBACK IS A RELEVANT OPD
AS TOP
- 2) "PAGE NUMBERS" WILL BE OBVIOUS
FEEDBACK IS DIALOG WITH
THIS TITLE
- 3) WOULD READ EVERY OPD. "FORMAT"
NAV IS SEEN DIRECTLY RELATED
TO JOURNALING, BUT FEEDBACK
IS DIALOG WITH "START A"
- 4) AS FOR OTHER ALTERNATIVE

(THIS PART IS MINE)

PART 2

FITTS' LAW COULD BE USED \rightarrow THE CONTEXT OF THE KEYSTROKE-LEVEL MODEL, WHERE IT WOULD DESCRIBE THE RELATIVE AMOUNT OF TIME TAKEN TO MOVE THE MOUSE TO THE NEXT ITEMS, EVEN THE MENU TO THE DIALOG, AND TO DIALOG OPTIONS. THESE TIMES WILL BE RELATED BY A LOG LAW INCREASING WITH DISTANCE AND DECREASING WITH TARGET SIZE.

THIS WOULD BE MOST INFORMATIVE FOR EXPERT USERS WHO CARRY OUT THIS OPERATIONS VERY FREQUENTLY. FOR USERS WHO AREN'T SURE EXACTLY WHAT TO DO, MOST OF THE TIME WILL BE VERY SMALL COMPARED TO LEARNING TIME

(THIS PART 6 MOVES)

PART 3

TO IMPROVE ON THIS SYSTEM, YOU COULD
CARRY OUT AN EXPERIMENT TO OBSERVE
HOW EASY PEOPLE FIND ALTERNATIVES. YOU
COULD INTERVIEW TARGET USERS TO FIND
OUT HOW THEY REFER TO THE TASK,
YOU COULD FORM COQUESTIONS FROM FAMILIAR
EXISTING PRODUCTS. YOU COULD USE COGNITIVE
DIMENSIONS TO OBSERVE THE HIDDEN
DEPENDENCIES THAT RESULT FROM A SEPARATE
ABSTRACTED MANAGER, AND POSSIBLY POP-UP
A PAGE NUMBER ASSISTANT WHEN THE
USER TRIES TO EDIT THE PAGE NUMBER
DIRECTLY.

(THIS PART 4 MINUTES)