1995 Paper 7 Question 13

Designing Interactive Applications

At the reception desk of a highly secure organisation, all visitors and staff are required to register before entry to the building. The organisation's management is concerned to reduce registration delays without increasing levels of staffing at the desk.

(a) Write a one-sentence statement of a problem in interactive system design, aimed at addressing this situation. [3 marks]


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┌─────────────────────────────────────────┐
│ Visitors: type your name   ╭─────────╮   │
│ and your organization      │ To See  │   │
│ using the keyboard:        ╰─────────╯   │
│                           ┌──────────┬─┐ │
│ ┌───────────────────┐     │Anderson J│⬆│ │
│ │                   │     │Beatty W  │ │ │
│ └───────────────────┘     │Bretton S │▓│ │
│ Then select the name of   │Carter V  │▓│ │
│ the person you are see-    │Childs S  │▓│ │
│ ing and click on "To See"  │Cousins D │⬇│ │
│                           └──────────┴─┘ │
├─────────────────────────────────────────┤
│ Employees: select your      PIN:         │
│ name, enter your 4-digit   ┌──────────┐  │
│ PIN using the keypad       └──────────┘  │
└─────────────────────────────────────────┘
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(b) The figure above shows the screen layout of a possible system for visitor and staff registration, using multiple terminals, each equipped with display, keyboard, keypad and mouse. Name three methods you might use in assessing the usability of this design, and the reasons why each method might be useful. [5 marks]

(c) Describe, for the benefit of a new member of the design team, how to go about applying *one* of the three methods you have named in part (*b*). [8 marks]

(d) What interaction style, other than the direct-manipulation style illustrated in the figure, would be appropriate for this application,

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