1993 Paper 8 Question 5

Designing Interactive Applications

Distinguish the terms *needs analysis* and *requirements analysis*. Provide an example to illustrate the difference. [3 marks]

What is a *strong requirement*? Provide counter-examples and explain why each example is not a strong requirement. [4 marks]

What role does a *functional specification* play in a requirements specification? Give a one-sentence example. [3 marks]

The receptionist at a small research laboratory is required to field incoming messages and make sure that they reach the recipient in a timely manner. Some messages arrive by word of mouth, others by phone, courier, e-mail or FAX. There are about 100 recipients, most of whom are researchers. They spend a large proportion of their time in meetings of one sort or another, some of which are held in offices, the remainder in conference rooms. The receptionist endeavours to avoid interrupting important meetings unnecessarily.

It is proposed to build a system based upon Active Badge technology to improve message handling activities in the laboratory. Each member of staff wears an active badge. An existing Location Server provides client applications with up-to-date information about the location and movements of each active badge.

Sketch out the methods you would employ to establish the users' needs for the proposed system. Describe the categories of information you would pass on to the designer and illustrate each with one or two examples. [10 marks]