COMPUTER SCIENCE TRIPOS Part IA - 2015 - Paper 2

6 Software and Interface Design (AFB)

This question is concerned with the user interface of a system for switching audio and video streams in a lecture theatre. This system should be usable by the following people:

- lecture theatre technical support staff who define standard configurations;
- regular lecturers who may personalise these configurations; and also
- visiting lecturers who might only use the system once.
- (a) Create outline sketches of two different UML diagrams that would be most useful in defining and refining the key design elements of this system as described above.

 [8 marks]
- (b) Describe an interaction design approach that can be used to determine whether the proposed user interface will exhibit the overall usability properties required.

 [6 marks]
- (c) If it becomes necessary to replace a component of the user interface after implementation of the system is complete, describe the approach that could be taken at different points in the resulting upgrade project to ensure that the modified system continues to satisfy user needs.

 [6 marks]